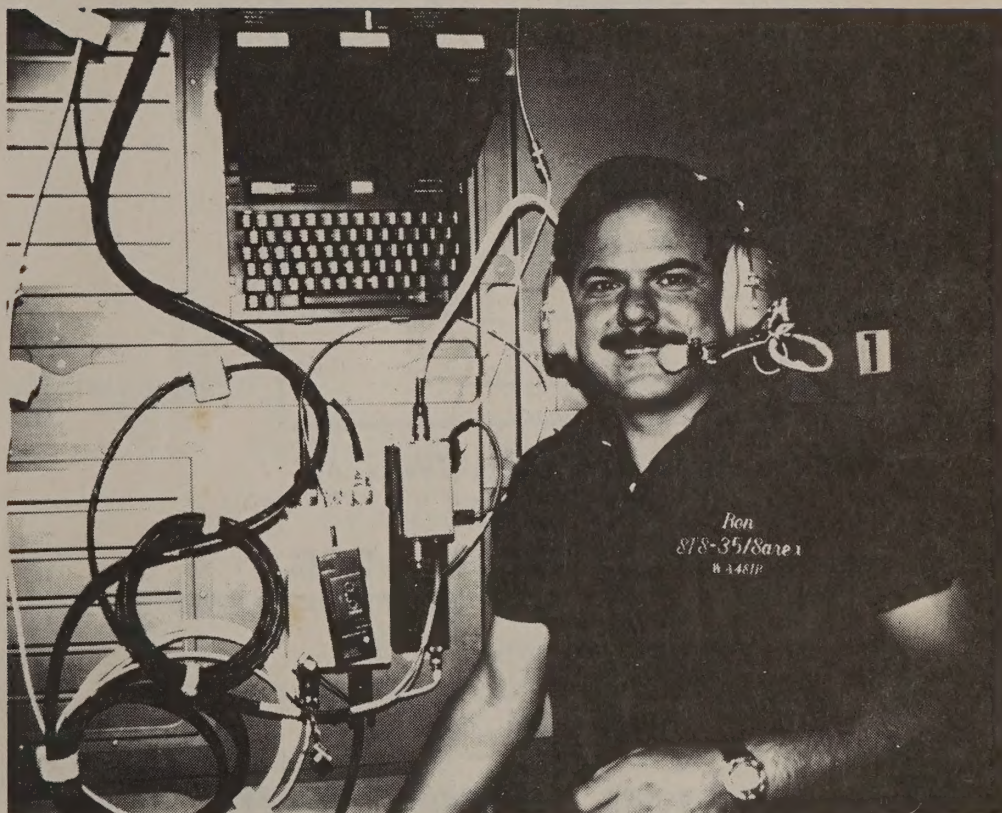




APRIL 1991



Meet Ron Parise, WA4SIR
At the Annual Spring Banquet
April 6

See page 29

FCC Highlights ◉ ARRL Report ◉ VE Exam Schedule ◉ Public Service Report
DX Column ◉ Feature Articles ◉ Club Reports ◉ Want Ads ◉ Much More
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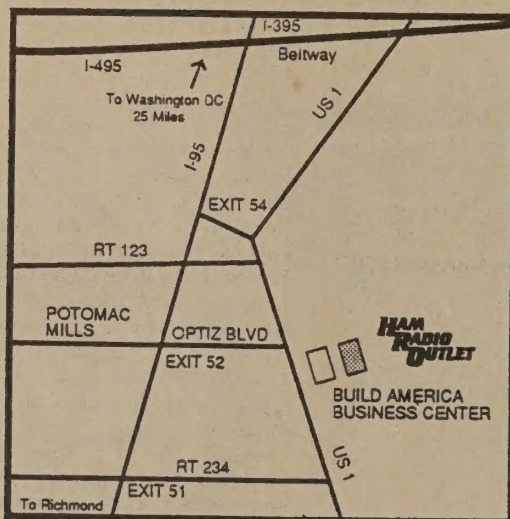
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PRESIDENT'S CORNER

By Phil Russo - N3GDD

President, Foundation for Amateur Radio

I just got done watching the news this evening. The offensive ground war stops in about an hour.

The local Fox network had an interesting story that really touched me, and I thought I would share it with you.

When all this started, the President promised this would not be another Viet Nam. A promise, I'm personally glad he kept. We as a country are pretty much at this writing still amazed at the speed, precision, and totality of the last five days. And while there were casualties, fortunately they were amazingly few given the size of the operation. One of the positive by-products I see as probably most of our readers see also is a return to patriotism. I would be less than honest if I didn't say it makes my eyes well up when I see all these various displays of patriotism, loyalty, unity, or whatever name you want to put on it. To see this country stand behind the troops, the President, and the congress, is truly a unique sight in these modern times. Let us all remember to give these brave men and women the home-coming they deserve, and not what there predecessors got. When these troops get back they'll have the same symptoms as those who came back twenty years ago. The same moodiness, the same fears, the same sleepless nights, and some will have the same dreams.

I don't know enough words to stress the importance of being there for these people. One of the comments made by a young soldier who narrowly escaped the barracks SCUD attack said his bunk looked like ground zero. Now picture that...put yourself in that young man's shoes...do you really feel like sleeping now? Our support, our empathy, our understanding and patience is what is needed in the weeks and months to come. Most of us have been in the service and understand what I'm talking about.

I'm not normally a political animal, but you see I have my reasons. I made a promise when all this Middle East stuff came about. I would not do to these troops what was done to me. There will be wounds to heal. A lot of them. Let us be part of the solution, not part of the problem.

God blessed this great nation in many ways, whoever you pray to - go thank him for the safe, speedy return of our troops, and thank him for the insight and wisdom of cooler heads than those who started the fight.

See you at the Spring Banquet.....'till next time...73's

N3GDD

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Coming Events

1991

- Apr 6 - 7 **Greater Baltimore Hamboree & Computerfest (See Flyer on page 28)**
Apr 6 **Spring Banquet sponsored by FAR & local QCWA Chapters (Page 29)**
Apr 12-14 **Goddard ARC Special Event commemorating 1st space shuttle. (Page 27)**
Apr 13 **Fort Pierce Florida Special Event Operation KJ4YF (See page 51)**
Apr 14 **Raleigh, NC Hamfest**
Apr 21 **Carroll County Hamfest & Computer Show, Westminster, MD (Pg 26)**
Apr 26-28 **Dayton Hamvention**
Apr 26 **Dayton/Cincinnati QCWA Banquet (See page 38)**
- May 17-19 **ARRL Atlantic Division Convention & Rochester Hamfest**
May 18 **K4AF Armed Forces Day Special Event from Pentagon (Page 27)**
May 18 **Maryland Mobileers Special Event from submarine USS Torsk (Page 27)**
May 18 * **Roanoke Valley ARC Hamfest**
May 19 **Wheeling, WV Hamfest/Computer Fair, Sponsored by Triple States**
May 26 **Memorial Day Hamfest, Howard County Fairgrounds**
- Jun 2 **Ole Virginia Hams Hamfest & Computer Fair, Manassas, VA**
Jun 16 * **Frederick Hamfest**
Jun 22-23 **Field Day**
June 29 **WVA ARRL State Convention**
Jul 28 **BRATS Maryland Hamfest (See page 50)**
Aug 4 **Winchester Hamfest, Berryville, VA**
Sep 8 **Gaithersburg Hamfest**
Sep 21-22 **ARRL Roanoke Division Convention, Virginia Beach, VA**
Sep 31 * **Shelby, NC Hamfest**
Oct 13 * **Howard County CARA Hamfest**

* Dates marked with an asterisk (*) are NOT confirmed. The dates shown are best guesses based on the schedules of previous years. Hamfest sponsors are urged to advise Auto-Call as soon as 1991 dates have been established. Thanks to the SouthEastern Repeater Association Repeater Journal for much of the Hamfest date information above.

Please keep Auto-Call advised of important Coming Events.

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The HAMGRAM is a free service from EEB to all subscribers (Want to subscribe? Just fill in the subscription blank) and is intended to keep you, our customers and readers, informed about new products, special sales, close-out items, club & VEC information, and other news of interest.

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GSA CONTRACT

EEB is presently negotiating a contract with GSA. This particular contract involves many popular amateur radio products.

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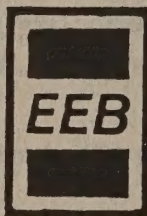
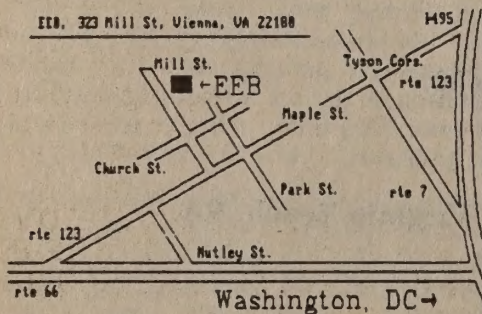
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FCC HIGHLIGHTS

by Bill Grenfell W4GF

"In an event that even captured the interest of the New York Times, ... (02/14/91), ... the FCC's Norfolk, VA, office cited 11 Amateur packet operators for violation of the Part 97 restrictions against business communications. They are alleged to have transmitted a message from an anti-war organization. "Three of the eleven received letters that are equivalent to Notices of violation, according to Norfolk Engineer in Charge (EIC) J. Jerry Freeman. He investigated a legitimate complaint. "Freeman told us, and found that the complaint was correct." The engineer also said he is not on a hunt for violative packet operations, but added that with the new no-code Technician license, many new people will be getting into ham radio - another reason why Amateurs will have to "...clean up their act."

According to AMSAT President Emeritus Tom Clark, W3IWI, the citations "...may well spell the end to much of Amateur packet radio." "Clark was one of those cited by the FCC. He described the FCC's "demand" for a response within 10 days as "chilling." "This appears to be the first time that the Commission has enforced the rules against operators of packet stations who retransmitted an allegedly violative bulletin that originated at another station. A debate has raged for years over whether operators of intermediate stations in a packet network should be held responsible for compliance of messages they transmit. The FCC, however has steadfastly maintained that each Amateur operator is responsible for complying with Part 97." "The letter sent by Freeman to the several Amateurs, dated Jan. 25, 1991 said, "I have received a report that indicates that you may have operated your A Amateur Radio station in violation of Section 97.113(a) of the Commission's Rules. "It appears that you used the Amateur Radio Service to facilitate the business activity of THE COALITION TO STOP U.S. INTERVENTION IN THE MIDDLE EAST." EIC Freeman's \$300 forfeiture notices were reported to have been sent to the licensees of Amateur stations N4HOG, WB0TAX, WA4ONG, WA3ZNW, KA3CNT, and WA3TSW as well as N3LA and WA3QNS.

The message, the transmission of which caused issuance of the violation notices, "asked readers to "call a 900 number or business office or fax numbers, to voice their opinion about the Persian Gulf crisis. 900 numbers of course, generate revenue for the provider of the number." The packet message did not mention the \$10 fee assessed by the phone company against callers of the 900 number." (W5YI Report 02/01/91).

"International Amateur Radio Network (IARN) founder Glenn Baxter/K1MAN has again been cited by the FCC for alleged violations of Part 97. Although several other Amateurs have been cited and fined for violative operations on the HF bands, Baxter's \$3400 fine total now registers the highest dollar amount. "Baxter contends the FCC does not have the authority to levy fines - only Notices of Apparent Liability (NAL) "K1MAN's 45 minute broadcasts are transmitted 44 times a week on 80, 40, 20 and 10 meters." He has paid none of the forfeitures and has threatened the FCC with a lawsuit. "The first violation notice, sent last August, did not carry a fine. It was followed by several NAL's, each of which carried monetary forfeitures." In a period extending from September well into January '91, at least seven forfeiture notices were issued for communications concerning business and broadcast activities and at least one for interfering with an on-going exchange of Amateur Radio communications. (W5YI/01/0191).

THE AMATEUR RADIO PROTECTION BILL, H.R.73, WAS INTRODUCED IN THE HOUSE OF CONGRESS ON JAN. 3 BY CONGRESSMAN JIM COOPER (D-TN).

SECTION 1. SHORT TITLE. This Act may be cited as the "Amateur Radio Spectrum Protection Act of 1991."

SECTION 2. FINDINGS. Congress finds that--

(1)...more than 490,502 radio Amateurs in the United States are licensed by the Federal Communications Commission after a thorough examination in radio regulations and technical principles of radio communications, as required by international regulations;

FCC HIGHLIGHTS - Continued

(2)...by international treaty and Federal Communications Commission regulation the Amateur is authorized to operate stations in a radio service of intercommunications and technical investigations solely with a personal aim and without pecuniary interest;

(3)...among the basic purposes for the Amateur Radio service is to provide voluntary noncommercial radio service particularly emergency communications;

(4)...emergency communication services by volunteer radio Amateurs have consistently and reliably been provided before, during, and after floods, tornadoes, forest fires, earthquakes, blizzards, train wrecks, chemical spills, and other disasters; and

(5)...the Federal Communications Commission has taken actions which resulted in the loss of over 100 MHz of spectrum to Amateurs.

SECTION 3. FEDERAL POLICY REGARDING REALLOCATION OF AMATEUR RADIO SPECTRUM.

Section 303(c) of the Communications Act of 1934 is amended--

(1) by redesignating subsection (c) as subsection (c)(1); and

(2)...by adding at the end of such subsection (c)(1); the following new paragraph:

"(2) The Federal Communications Commission shall not diminish existing allocations of spectrum to the Amateur Radio service after January 1, 1991.

The Federal Communications Commission shall provide equivalent replacement spectrum to the Amateur Radio service for any frequency reallocation after January 1, 1991."

THE LATEST CALLS ISSUED FOR THE STATESIDE, ALASKA AND HAWAII CALL AREAS WERE:

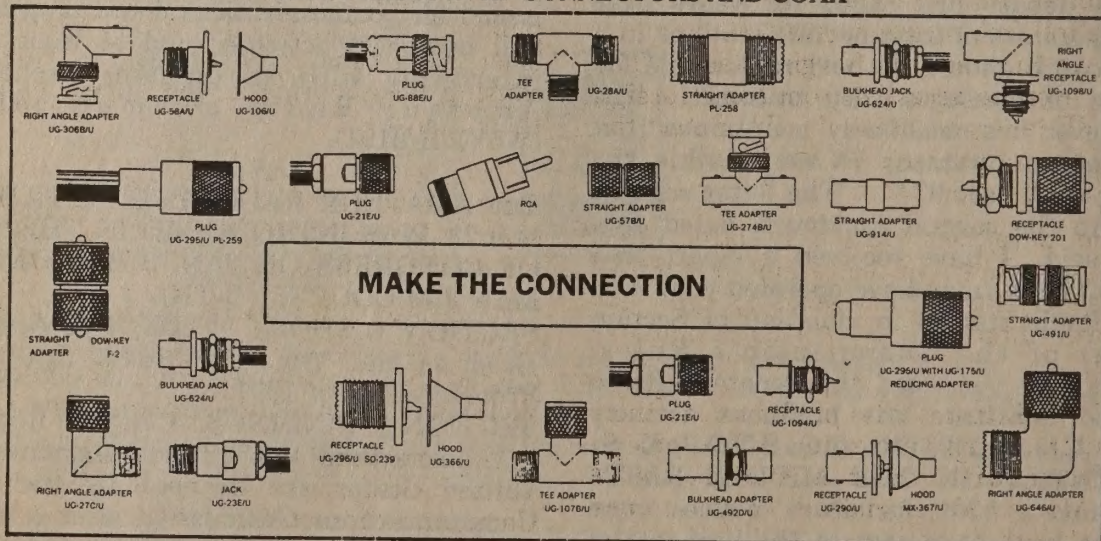
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AC4CL	KN4VS	KC4VNN
AA5WV	KI5NF	N5RZI	KB5OUF
AB6AP	KK6VV	KC6RJT
AA7HH	KG7MK	N7QEI	KB7MPU
AA8DC	KF8LE	N8NIS	KB8LTE
WY9R	KF9BG	N9KMA	KB9GFA
AA0DK	KF0PH	N0MWW	KB0IHL
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American Radio Relay League Report

By John Swafford -- W4HU

This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

LEAGUE STREAMLINES VOLUNTEER EXAM PROGRAM. Just in time to welcome newcomers to Amateur Radio via the code-free Technician license, ARRL has announced major improvements in its Volunteer Examiner (VE) program. The changes, most of which take effect immediately, will make examinations more convenient for potential Amateurs and present hams wishing to upgrade.

The new ARRL program offers greater flexibility and support for Volunteer Examiners who participate through the ARRL Volunteer Examiner Coordinator (ARRL/VEC).

To make it possible for VEs to schedule examination sessions more frequently and to provide more publicity in their local areas, the League will now permit its VE teams to retain up to \$4.00 of the \$5.25 exam fee to offset expenses incurred locally. The services the League has traditionally provided to its VE teams free of charge will continue to be available on that basis.

VEs may now telephone the ARRL VEC via a toll-free number: 1-800-0-ARRL-VEC (1-800-927-7583). The toll-free service is available in all 50 states, Puerto Rico, and the Virgin Islands. The service can even be accessed from some foreign countries; VE teams overseas should contact the ARRL/VEC for information on how to access the number from their locations.

VEs who have been active in other VEC programs and whose accreditation in another program is current are now able to apply for "instant accreditation" as ARRL Volunteer Examiners.

By April 1, VE teams who prefer to use their own computers to generate exams will be able to do so. Teams that prefer a multiple-choice format for Morse code exams will be able to use that format, at their option.

"As a result of the code-free Technician license, the demands on Amateur Radio Volun-

teer Examiners will be very heavy in the coming months," says ARRL Executive Vice President David Sumner, K1ZZ. "We want to give our VEs the best support we can during this critical period. We also want to make sure that anyone seeking an opportunity to take an exam won't have far to look."

HAMS AID HUNT FOR RFI TO INFANT STATUS MONITOR. Two Amateurs in Ohio have turned a potential public relations problem into a success story by offering to assist in another case of interference to an infant apnea monitor. This subject was first reported in The ARRL Letter on May 18, 1990, following release of a federal Food and Drug Administration warning concerning the monitors. The apnea monitors, the Letter reported, were subject to various kinds of electrical interference, from sources ranging from radio transmitters to air conditioner compressors.

On January 30 the Hubbard, Ohio News reported -- on its front page under the banner headline "Appeal made to stop radio interference" -- that Jane and Jerry Hazi were making a public appeal to find the source of interference, "such as a ham radio or citizen band radio," causing false alarms in the apnea monitor for their nine-week-old son, Victor.

The couple made the appeal after initial attempts at relief from the manufacturer fell short. Victor at that point was on his fifth monitor, from two different companies.

According to the News, "a ham radio operator nearby has been very cooperative, and even offered to discontinue using the radio until Victor no longer requires the monitor."

Another local paper, the Youngstown Vindicator, picked up the story and reported that the Hazis had contacted the FCC, which provided them with a list of licensed Amateurs in the vicinity. The Commission told the Hazis "there wasn't much more they could do," the paper said.

ARRL Report - Continued

The Vindicator also said that "a resident who lives near the Hazis' home is a ham radio operator, [but his] transmission times correlate with only some of the times the monitor is reacting."

At this point Amateurs Tim Diffy - K3LR, and Scott Jones - WB3KKX, offered to help.

Duffy and Smith, both RF engineers for Wilcom Cellular One in Youngstown, acted as interested third parties. They learned that the manufacturer of the latest monitor in use had installed ferrite beads on unit's leads, after shielding them.

"This coincided with publication of the newspaper articles," Duffy said. "It is difficult to determine exactly what led to a decrease in the false alarms, but they did decrease."

Duffy also noted that a light dimmer had been installed in the baby's room a few weeks before the false alarms began and speculated that it also could be to blame for some of the interference to the monitor.

Duffy and Smith got additional input from another Wilcom engineer, Everett Dennison, K8TME. Dennison, in the process of designing a device to test for molecular-sized holes in surgical gloves, had encountered similar RFI problems.

"Doug DeMaw - W1FB and League publications came to the rescue," Duffy said. "Everett drew heavily on them in debugging his prototype."

As a result of this incident, the Hazis have contacted the FDA, to ask for their help in seeing that all infant apnea monitors are shielded in the future (at present the monitors are not type-approved by any government agency).

As for the hams' role, "We saw the newspaper stories and felt we should act immediately to put radio Amateurs in a positive position," Duffy said. "The Hazis now look at Amateur Radio in a different light, as a group of technically trained people who are willing to help, even when [we] are not the cause of the problem."

PUBLIC RELATIONS FIRM JOINS

LEAGUE TEAM. Acting swiftly on a Board of Directors authorization for professional public relations services, the League has retained Consultech Communications, Inc., of Troy, NY, to mount a media campaign.

Jock Elliott - KB2GOM is vice president of Consultech and will lead the League's teams there. "The advent of a code-free Amateur license is a tremendous opportunity," Elliott says. "Our goal is not just to get the word out about Amateur Radio, but also to position the ARRL as the premier source of information on Amateur Radio."

"Consultech's main job is to promote Amateur Radio to prospective hams," said EVP Sumner. "Jock has been bugging me for a couple of years about how the League should take better advantage of opportunities to promote Amateur Radio. I'm glad we can put a talented team of publicists to work on this without first having to devote months to educating them," Sumner said.

Consultech plans campaigns on two fronts: the general media, and one aimed specifically at personal computer hobbyists. The "general" campaign will consist initially of mailings to some 400 publications. They will receive a press kit with news releases, background on Amateur Radio, photos and diagrams. Consultech plans to personally contact a number of publications.

The campaign for computer users will take a slightly more technical approach, stressing packet networking.

Consultech is a 14-person marketing communications firm specializing in "technology-oriented clients." They have conducted national publicity campaigns for Passport to World Band Radio, and also have worked for Monitoring Times, Lowe Electronics Ltd., and Sony America.

Elliott has been a member of the League's public relations committee, a volunteer group formed to advise the Board. Concurrent with being retained by the League, Elliott has tendered his resignation from the committee.

SOVIET LAUNCH SUCCESSFUL. Radio M-1, the latest Soviet Amateur Radio satellite, was launched in early February, according to the AMSAT News Service. The satellite, a joint effort of AMSAT-U-ORBITA (USSR) and AMSAT-DL, is now designated AMSAT-OSCAR 21 (AO-21), and is undergoing initial testing.

Also, Musa Manarov is active on packet from the Soviet MIR space station, and has been worked on 145.550 MHz. Signals are strong, according to KB2BD, and a large number of stations have been able to connect with MIR,

ARRL Report - Continued

although "the TNC in use on MIR can be said to have a very short fuse," he says (packets are sent rapidly and "if acknowledgments are not received within a short period of time, U2MIR-1 sends disconnect frames and clears its buffers").

An article in February QST by KO5I describes how to communicate with this new generation of Soviet satellites. More information also is available in publications from R. Myers Communications (PO Box 175, Litchfield CT 06759), as well as from AMSAT-NA.

DXCC FIELD CHECKING PROGRESS.

Rules for "field checking" of QSL cards for DXCC credit are now being formulated. When the program is implemented, DXers will be able to have cards from a list of approximately 250 "core" countries checked by volunteer field checkers. Only new awards will be covered, not endorsements to existing awards.

Field checkers will be nominated by DX clubs, approved by their ARRL division directors, and appointed by the League's president. The checkers must be ARRL members holding a DXCC award endorsed for at least 300 countries.

Headquarters staff are writing the program rules according to guidelines suggested by a committee consisting of K6ITL, W6CF and KB6ZV, and are preparing the list of core countries. The timetable for implementation of DXCC field checking is still being developed.

BRIEFS. Users of the ARRL Outgoing QSL Service are asked to make sure the country to which they are sending a card has a functioning bureau before sending the card via the ARRL Outgoing service. Those countries having bureaus are indicated in the ARRL DXCC Countries List.

In the past, cards received at HQ which could not be forwarded because there was no bureau were held indefinitely. These cards now will be returned to the sender, via the incoming bureau.

* Edgar F. Johnson, founder of the E.F. Johnson Company, died Feb. 11 in Waseca, Minn., of cancer. He was 91 years old.

Johnson, a pioneer radio Amateur who once held the call sign 9ALD, founded the E.F. Johnson Company in 1923, two years after receiving a degree in electrical engineering from the University of Minnesota. The company

began by selling parts to both Amateurs and commercial stations. Following WW-2 Johnson transmitters were bought in both kit and wired form by thousands of hams.

From 1959 to the mid-1970s, Johnson dominated the Citizens Band transceiver market, according to a story in the St. Paul Pioneer Press.

Hundreds of Amateurs helped Johnson celebrate his last birthday. Johnson leaves his wife, Ethel; two daughters, and three grandchildren and six great-grandchildren.

* The 80-meter Novice band will move on March 16, to 3675-3725 KHz. Higher-class licensees should remember that their power limit in this range is also 200 watts output.

* How many thousands of check marks have you made in Heathkit assembly manuals? Sad to say the end has come, as Heath has left the kit business (their stocks are currently being advertised at reduced prices). Heath will concentrate on home-study courses, home automation equipment, and assembled units, according to sources in the company.

* AMSAT's Tom Clark - W3IWI has been honored by a national science group. Clark was elected to fellowship in the American Geophysical Union.

"Fellowship is awarded to scientists who have attained acknowledged eminence in a branch of geophysics," Prof. Brent Dalrymple, president of the Union, wrote. "It is one of the few honors that AGU confers and the number of fellows elected each year is limited to 0.1 percent of the total membership of AGU," Dalrymple wrote.

Clark, an astronomer with the National Aeronautics and Space Administration, is president emeritus of AMSAT-NA and a member of its board of directors. He also is a member of the Tucson Amateur Packet Radio board of directors.

* The ARRL Foundation, which administers the Federation of Eastern Massachusetts Amateur Radio Associations scholarship fund, has received \$25,000 from the federation. FEMARA sponsors the ARRL New England Division Convention in Boxboro, Mass.

(Continued)

ARRL Report - Continued

* The numbers are in, and the League's membership is rebounding from the inevitable drop following a dues increase (which occurred last April, the first increase in eight years). Overall, League membership dropped 2.4% in 1990 (but just 1.6% among full members). At the end of 1990 total members-plus-subscriptions stood at 149,951.

The League had "a pretty good year, financially speaking," in 1990, said EVP Sumner (the League's audited financial statement for 1990 will appear in QST when work is complete). AMSAT-NA was flying high too, reporting some \$383,000 in gross income and a net of more than \$25,000.

* A reciprocal operating agreement has been signed between Thailand and the United States. The agreement became effective Dec. 15, 1990, after more than two years of negotiations, and is the first such for Thailand (Spain and Chile also are seeking reciprocal agreements with Thailand). According to the Radio Amateur Society of Thailand (RAST), licenses will be issued "on an equal status basis, and according to the national Amateur Radio regulations (1987), and only club station operation will be permitted for the HF bands."

Thailand should be added to the list of countries with which the U.S. has reciprocal operating agreements that appeared in the ARRL Letter, Jan. 16, 1991 issue.

ARRL BOARD MEETING HIGHLIGHTS.

The ARRL Board of Directors met in Farmington, Connecticut, January 18 and 19, 1991. Here are highlights of Board actions:

* Responding to the general support expressed by the amateur community for the FCC codeless Technician license decision granting all privileges above 30 MHz, determined that the League would not petition for reconsideration.

* Directed staff to implement a program for the field checking of QSL cards for initial applications of DXCC as set forth in guidelines specified by the Membership Services Committee.

* Authorized the addition to staff of a Public Relations Coordinator to address the need for the League to work actively for the improvement

of Amateur Radio's image with the general public. An outside consulting agency will be employed to buttress efforts to develop a continuing public relations campaign.

* Applauded outgoing DX Advisory Committee chairman Rick Roderick, K5UR, for his outstanding service to Amateur Radio, the League, and the DX community.

* Elected the following directors to the Executive Committee: Frank Butler, W4RH; Marshall Quiat, AG0X; Stephen Mendelsohn, WA2DHF; and Paul Grauer, W0FIR.

* Renewed its commitment to Amateur Radio education, stressing knowledge, skill, traditions and dedication to purpose. It resolved to renew the tradition of one-to-one, "Elmer," effort.

* Requested that the ARRL Monitoring System pay particular attention to the problem of non amateur stations in the 12 meter and 17 meter bands.

* Adopted a new band plan for the 13-cm band. The VRAC and VUAC will seek input for a new band plan for 222-225 MHz.

* Selected Huntsville, Alabama, as the site of the 1993 ARRL National Convention.

* Chose the San Francisco Bay area as the site of the 10th ARRL Amateur Radio Computer Networking Conference, scheduled for September 27-29, 1991. The hosting organization will be the Northern California Packet Association.

* Created a volunteer position for engineers to serve in an advisory capacity, similar to that of Volunteer Counsel, to assist amateurs with such matters as antenna support structures.

* Recognized members of the Johnson Space Center ARC for their efforts in keeping SAREX manifested on NASA shuttle flights. The Goddard ARC was recognized for its shuttle-related educational efforts.

* Changed the Assistant Technical Coordinator title to "Technical Specialist."

□ □ □

DX DX DX

John Kanode, N4MM

Two major DX events will take place in April. The Visalia International DX Convention will take place on April 12-14 and the DX forum and DX banquet at the Dayton Hamvention will take place on April 26-27. Both events are attended by many hundreds of DXers and have excellent programs.

The DX Bulletin offers a DXCC type award for 30 Meters. Contact 100 or more countries on 30 Meters and send the list of the countries contacted to the DX Bulletin, PO Box 50, Fulton CA 95439. The award is free and postpaid by the sponsor.

Without much advance notice, a station from Ethiopia appeared on the air. ET2A has been active on 10, 15 and 20 meters. At present, list operations has been the norm, however free style is expected soon. The main operator is Jack, W4IBB and he claims to have a written license which is renewable. The QSL manager is WB2WOW. No CW operation has been reported but it is hoped that some CW operation will take place in the future.

QRV Quarterly is a newsletter of US-USSR Amateur Radio news edited by Robert S. Howe, K1MZB. The contents include articles and photos of DXpeditions and other operating events that involve US and USSR amateurs. Anyone wanting to subscribe can send a SASE for each issue to Robert S. Howe, K1MZB, Route 2, Box 1190, Litchfield, CT. 04350

The DXCC backlog of applications is being worked down. As of late February, the DXCC desk is working on new applications dated January 1991 and endorsements dated September 1990. In the next several weeks, more effort will be directed on reducing the endorsement backlog.

3A200SM will be active on CW in the month of April to celebrate the 200th anniversary of Samuel Morse.

HE7 is a special prefix being used in 1991 by Swiss Amateurs, commemorating the 700th anniversary of the Swiss Confederation. Special QSLs will be used during this event.

Are you a newcomer to DXing? There is a new book for you. It is THE DXCC COMPANION and is published by the ARRL.

The book is written for beginners to DXing but contains lots of tips and ideas that can be used by all DXers.

DXAC NEWS

There are three new country petitions before the DXAC at this time. The Penguin Islands, North Korea and the Tatar SSR. The DXAC is reviewing these petitions and will be voting on these possible new countries in mid 1991. The DXAC member for the Atlantic Division is N2SS and the Roanoke Division is K4MQG.

Over the past weeks, stations signing /9K2 and /YI have been heard on the bands. Needless to say, it is very unlikely that these stations have proper permission to operate. These kind of questionable operations will make it harder or impossible for those who seek proper permission to operate in the future when things return to normal. If anyone is lucky enough to get a QSL from one of these unauthorized operations, it would not be valid for DXCC and other awards.

DX Contests for April.

CQ WW WPX SSB Contest March 30,31.
Swiss Helvetia Contest April 27,28

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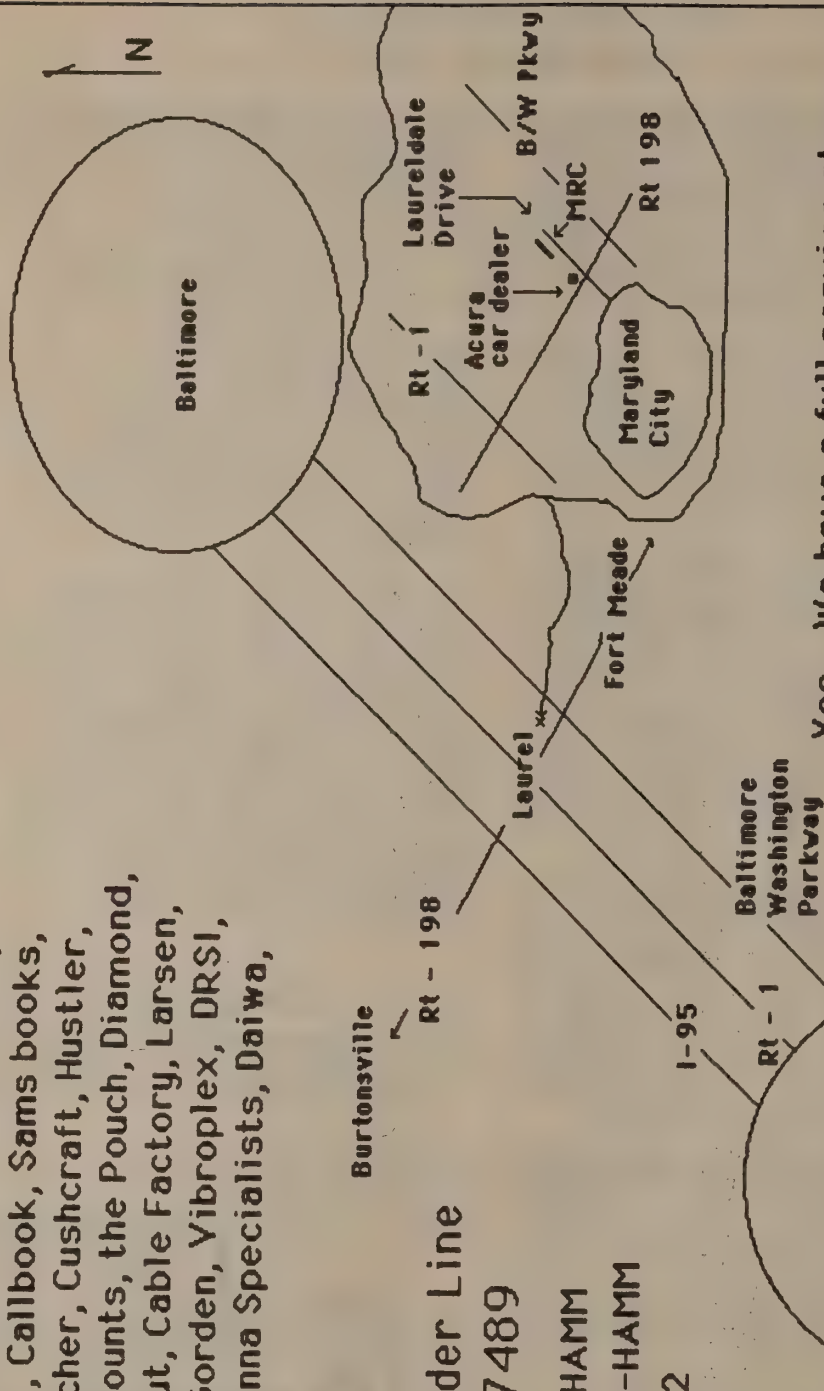
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Volunteer Examiner Cooperative

Nancy Draheim - NK4U
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(703) 691-0078

SCHEDULE OF EXAMINATIONS
1991

***IMPORTANT NOTE:** If you now have a Technician class license which was acquired prior to March 21, 1987, have a copy of it available when you decide to upgrade.*

EXAMS

- Apr 6** Williamsburg Area ARC (Williamsburg, VA) (ARRL VEC)
Contact: Andrew Swanson, WJ4X (804) 253-2811
- University of Maryland ARC (College Park MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld, N3FI (301) 513-5932
- Apr 7** VA Military Institued (Lexington, VA) (ARRL VEC) Walk-in
Contact: Gary Gearhart (703) 377-2027
- Apr 13** Massanutten ARA (Harrisonburg, VA) (ARRL VEC)
Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)
- Herndon Repeater Group (Herndon, VA) (ARRL VEC) Walk-in
Contact: Michael Rosat, N4FXP (703) 481-8380
- Anne Arundel Radio Club (LARC VEC) Pre-registration requested
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Apr 20** Laurel ARC (Laurel, MD) (Laurel VEC) Pregistration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Apr 28** Antietam Radio Assn ARC (Hagerstown, MD) (ARRL VEC) Pre-registration
Contact: Norma Jean Bollinger, NC3X (717) 597-8231 (Before 9:00 p.m.)
- May 4** Portsmouth ARC (Portsmouth, VA) (ARRL VEC)
Contact: Art Thiemens, AA4AT (804) 484-2857
- Middletown VE Team (Middletown, VA) (ARRL VEC) Limited walk-ins
Contact: Walt Quitter, NC4B (703) 869-5241
- University of Maryland ARC (College Park MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld N3FI (301) 513-5932
- MAY 11** Anne Arundel Radio Club (LARC VEC) Pre-registration requested
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083

Continued

Volunteer Examiner Cooperative - Continued

- May 18 Laurel ARC (Laurel, MD) (Laurel VEC) Pregistration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Hampton Roads Radio Assn. (Hampton, VA) (W5YI VEC)
Contact: Bill Runyon, N4BDH (804) 487-8611
- Richmond (Richmond, VA) Walk-in
Contact: Ron Bolton, WU4G (804) 798-5191
- Jun 1 Virginia Beach ARC (Virginia Beach, VA) (ARRL VEC)
Contact: Ed Robinson, WD4ROY (804) 468-0866
- University of Maryland ARC (College Park MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld N3FI (301) 513-5932
- Jun 8 PROS (Salisbury, MD) (Laurel VEC) Walk-in
Contact: Dave Bridge, B3MT (302) 436-8360
- Ole Virginia Hams ARC (Manassas, VA) (ARRL VEC) Walk-in
Contact: Harry Vorhauer, W4PVA (703) 368-0650
- Massanutten ARA (Harrisonburg, VA) (ARRL VEC)
Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)
- Anne Arundel Radio Club (LARC VEC) Pre-registration requested
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Jun 15 Laurel ARC (Laurel, MD) (Laurel VEC) Pregistration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Jul 6 Dept of State/GW University (Washington, DC) (ARRL VEC) Walk-in
Contact: Derrill Rohlf, W3WOX (301) 423-0179
- Jul 13 Chesapeake DX Assn. (Chesapeake, VA) (W5YI VEC)
Contact: Bill Verebely, KC4YX (804) 424-4764
- Anne Arundel Radio Club (LARC VEC) Pre-registration requested
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083

NOTE: All examinations require that you submit:
Copy of your current Amateur Radio license (bring original)
Completed FCC Form 610.

Check for appropriate examination fee.

Fees of individual VEC may vary.

ARRL Exam fee is \$5.25

W5YI Exam fee is \$5.25

Laurel Exams are still free.

Mountain VEC Novice Exams free

All other Mountain VEC Exams \$2.00

While most examinations are offered on a walk-in basis,
pre-registration is desirable in all cases.

This schedule of examinations appears each month in Auto-Call Magazine
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Training Classes

Bob Murnane, N5QLB
712 Lomax Street, Easton, MD 21601
301-820-9482 Evenings

No-Code Technician Classes, started March 19, Manassas, VA. It will not be too late to enter in early April. Sponsored by the "Ole Virginia Hams" Amateur Radio Club. Classes will be held at 7:30 p.m. at the Stonewall Jackson High School, Room 3-B; Manassas, Va. Examinations will be given on 6 June. For further information call John at (703) 791-5995.

Novice Training Classes, Baltimore, MD. Sponsored by BRATS. Classes are being held on an on-going basis every Friday evening at American Red Cross; 4700 Mt. Hope Drive, Baltimore (near Reisterstown Road Plaza Metro Station). Class is free; Materials (which you can keep) consist of a book and tape and cost \$19.90. For registration or information, contact Jeff Salamon, N3FHT at (301) 484-1362

Novice Training Classes, N.W. Washington, DC. Sponsored by MADRAS. For more information contact Larry Zeichek - N3GKZ (301) 484-6112.

Novice and Upgrade Classes, Lexington Park, MD. Sponsored by St. Mary's County Amateur Radio Assn. For further information contact WD8OYG or call (301) 862-2214.

GENERAL INFORMATION

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Fauquier ARC
Frederick ARC
Laurel ARC
MADRAS
Maryland Mobileers
Montgomery ARC
Mount Vernon ARC
NASA/Goddard ARC
Ole Virginia Hams
Pentagon ARC
Rock Creek ARA
St. Mary's County ARA
Shenandoah Valley ARC
Southern Maryland ARC
Sterling Park
Tri County ARC
Vienna Wireless
Washington Adventists

Harry Jones - N4CWP (703) 204-1781
Tony Young - WA3YLO (301) 262-1917
Fred Bardsley - WD4DHW (703) 533-0372
Phone 1-800-HAM FEST - VB
Jeff Salamon - N3FHT (301) 484-1362
Bob Teitel - W3IDT (301) 654-3484
Bill Mills - KC5PF (703) 937-4090 (H), 818-3955 (O)
Steve Bauman - W3FOA (301) 662-4552
John Albertine - W3GFX (301) 490-5286
Larry Ziecheck - N3GKZ (301) 484-6112
Bill Dillon - WA3SCW @ WB3V in Packet
Ken Nichols - KA3KGL (301) 977-5405
John Forrest - WZ4A (703) 971-3905
Vikki Gigante -KA3PVS (301) 249-2609
John (703) 791-5995
David Boyd - K9MX (202) 697-0630
Walt Ramsey - AK3B (301) 949-3954
Dwayne Kincid - WD8OYG (301) 862-2214
Guy Black - W4PSJ (703) 722-4952
Vic Curtis - WA3YUV (301) 888-1388
Art Nevins - WA4NTP (703) 437-9382
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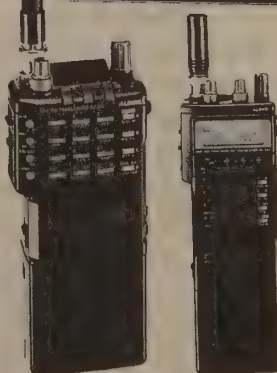
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PUBLIC SERVICE REPORT

Hank Black - N3ESR

(301) 340-8595

Material for the PUBLIC SERVICE REPORT can be left to N3ESR on the WA3ZNW packet bulletin board on 149.090 MHz, called by telephone, or mailed electronically by modem on arrangements, or mailed to Public Service Report, 105 North Van Buren St., Rockville, MD 20850-1860. Deadline for receipt of material is the third of the month.

DOGWOOD HALF-HUNDRED LOOKING FOR VOLUNTEERS

It is not too late! Sign up now to exercise your mobile and handitalkie radio skills at the Annual Dogwood Half-Hundred mountain endurance hike on Saturday, April 20th.

Spend a scenic day west of Front Royal, south of Strasburg, Virginia in the mountains developing your emergency/disaster/public service radio operating skills on two meters. Other bands and packet radio are also being used.

For more information contact John Birch, KA4YMA or Mike Sawyer, KG5IB (see Public Service Calendar at end of this column).

SKYWARN NEWS FROM NATIONAL WEATHER SERVICE

For registered SKYWARN members this is old news for the following information appeared in February 1991 SKYWARN Newsletter.

Ground has been broken for the new Doppler Weather Radar System (WSR-88D) at Sterling, Virginia. Once completed the tower and radar dome will be 150 feet above ground. The system is scheduled to be operational by the end of May.

SKYWARN was active this past winter being activated twice for winter storms. SKYWARN reports allowed the National Weather Service Forecast Office in Sterling, Virginia to monitor the areas that were subject to the snow-ice change over. Areas in Northern Virginia and west central Maryland were hit by downed trees and power lines with some secondary and back roads becoming impassible.

The National Weather Service is hoping to increase its SKYWARN coverage in the western counties through scheduled training through out the region. Basic classes are scheduled for April 24th and May 11th at Sterling, Virginia. Other basic classes are being scheduled for Fredericksburg, Virginia and Hagerstown and Cumberland, Maryland.

For further information on SKYWARN classes and registration, contact Meteorologist Barbara McNaught or her assistant Melody Hall at the NWS Forecast Office at (703) 260-0209.

For information regarding amateur radio involvement and SKYWARN contact your local Emergency Coordinator or the editor of this column.

PUBLIC SERVICE HONOR ROLL

A Public Service Honor Roll certificate is available to those who obtain 60 or more points per month (40 or more for Novice/Technician) for 12 consecutive months, or for 18 out of 24 months. Reports should be sent to WB4ZTR before the 5th of the month.

See the January Honor Roll Report on the next page.

Public Service Honor Roll Report
Virginia Section
January 1991
All Stations Single Operator Status Unless Noted

CATEGORIES										
Call	1	2	3	4	5	6	7	8	9	Total
N4GHI	30	30	12	12	12	22	0	5	0	123
W4JLS	30	30	12	12	23	0	0	5	0	112
WB4KSG	30	30	12	12	12	4	0	5	0	105
K4MTX	30	30	12	12	12	4	0	0	0	100
N4EXQ	0	30	0	12	12	21	5	0	10	90
KJ4EK	25	30	0	12	12	0	0	5	0	84
AA4AT	30	15	12	4	12	1	0	0	0	74
KN4EE	9	28	0	12	12	3	0	0	10	74
NW3K	4	30	0	12	12	2	0	5	5	70
WA4DTE	0	30	0	12	12	3	0	5	0	62
N4KSO	23	9	12	0	12	0	0	5	0	61
KB4CAU	0	30	0	12	12	7	0	0	0	61
KC4OJM	0	29	0	12	12	8	0	0	0	61
WB4ZNE	0	30	0	12	12	0	0	5	0	59
WB4ZTR	6	19	0	12	12	0	0	5	0	54
K4VWK	8	15	9	0	6	1	0	0	0	39
WD4MIS	3	5	9	0	12	4	0	0	0	33
K4MLC	21	0	12	0	0	0	0	0	0	33
W4TZC	15	1	0	0	0	5	0	0	0	21
WA4TVS	0	5	0	9	0	0	0	5	0	19
WA1VRL	0	10	0	0	0	0	0	5	0	15
KJ4UF	0	2	0	3	0	0	0	5	0	10
N4FNT	0	9	0	0	0	0	0	0	0	9
N4XAQ	0	4	0	0	0	0	0	0	0	4

Categories:

1. Checking into CW nets, 1 point each (max. 30)
2. Checking into Phone/RTTY nets, 1 point each (max. 30)
3. NCS CW nets, 3 points each (max. 12)
4. NCS Phone/RTTY nets, 3 points each (max. 12)
5. Performing assigned NTS liaison, 3 points each (max. 12)
6. Delivering a formal message to a 3rd party, 1 point each (no max.)
7. Handling an emergency message, 5 points each (no max.)
8. Serving as Net Manager or Emergency Coordinator, 5 points (max. 5)
9. Participating in a public service event, 5 points each (no max.)

-Submitted by Steve Cziakowski, WB4ZTR, Virginia Section Emergency Coordinator

PUBLIC SERVICE CALENDAR

- Apr. 6 National Capital ARES Council Meeting 10 a.m. - location to be announced
Contact Hank Black, N3ESR (301) 340-8595 or Harry Jones, N4CWP (703) 204-1781
- Apr. 7 The Super Cities Walk, Multiple Sclerosis
Contact Hank Black, N3ESR (301) 340-8595 or Bob Lewis, N4SCK (703) 830-3495
- Apr. 13 Cherry Blossom Parade (date unconfirmed)
Contact Bob Lewis, N4SCK (703) 830-3495 or Ed Ober, KC4EFJ (703) 591-0422
or Dan Gropper, KC4OCG (703) 281-2358
- Apr. 14 Red Cross 10K Run (Washington D.C.)
Contact Bob Lewis, N4SCK (703) 830-3495 or Ed Ober, KC4EFJ (703) 591-0422
or Dan Gropper, KC4OCG (703) 281-2358
- Apr. 20 Dogwood Half-Hundred Mountain Endurance Hike
Contact John Birch, KA4YMA (703) 533-3668 or Mike Sawyer, KG5IB (703) 368-4872

SRAM-028

[Soviet Radio Amateur Movement]

Edited by Dexter Anderson, W4KM

[Summary translations from the Soviet Amateur Press]

[Comments in square brackets and footnotes are by translator]

[from the December 1990 issue of RADIO magazine]

"SEATTLE, SUMMER 1990"¹

by Gennadiy Grigor'yevich Shul'gin, KB7JAW²/UZ3AU [ex-UA3ACM]

Until recently it would have been impossible to imagine joint operations with foreign colleagues in international radioexpeditions, especially from places that were inaccessible³ without special permission.

In the stagnation⁴ times of blessed memory, Minsk shortwaver Viktor Ledenev, RC2AF, suggested holding joint Soviet-American radiomarathons. Viktor wrote to Georgiy Mikhaylovich Yegorov⁵, then Chairman of the Central Committee of DOSAAF USSR, and to Larry Price, President of the ARRL, suggesting friendship radiocompetitions and calling them Goodwill Competitions. This idea was approved, but became a reality only last year!⁶

Following the first radiomarathon, the Americans invited their Soviet colleagues to Seattle, where the Goodwill Games were planned for July and August 1990. The World Team Shortwave Championship was scheduled for the same period, with participation by sportsmen from other countries and using rules as close as possible to the well-known Soviet on-site/off-site championships.

Those who would go to the USA were determined by first, second, or third places earned in large international competitions over the last few years. Unfortunately, the Federation of Radio Sport didn't publish the requirements, which led to all kinds of rumors, gossip, and complaints.

Finally, the two-man teams were selected: Georgiy Alekseyevich Rumyantsev, UA1DZ,⁷ and Vladimir Gordiyenko, RB5IM; Vladimir Umanets, UW9AR, and Yuriy Kurinyy, UA9AM; Konstantin Kh. Khachaturov, UW3AA, ex-UW3HV, and Yuriy Donskikh, UA9SA; Mikhail Zavarukhin, UWØCN, and Yevgeniy Stavitskiy, UWØCA. The Soviet team was led by Vasiliy Bondarenko, UV3BW, and was accompanied by Boris Grigor'yevich Stepanov, UW3AX, Valeriy Pakhomov, UA3AO, Valeriy Agabekov, UA6HZ, and myself.

Only with great difficulty was the team able to hold training meets at Khabarovsk and Moscow and to scrape up equipment comparable to what would be used at the forthcoming competitions. Valeriy Agabekov, UA6HZ, brought his "overseas" transceiver to the meets so the sportsmen could at least get used to the knobs on the equipment they would use at the competitions.

After an unwarranted and tiring 26-hour wait at Moscow's international airport, we finally took off, and another ten hours later were over the fabulous evergreen northwest of the United States and the pearl of the State of Washington, the city of Seattle, capital of Goodwill Games-90.

The Organizing Committee of the Championship, headed by Danny Eskenazi, K7SS, decided to lodge us not in expensive hotels, but with radioamateur families. This of course enabled us to get to know Americans but meant that the team members met only at common events.

We were invited to a party at Danny Eskenazi's place, attended by participants from 15 countries and many well-known shortwavers. Martti Laine, OH2BH, was there; he was the main "ideologue" of the championship, since it was he who basically wrote the rules. Next to him were Rusty Epps, W6OAT, the main judge, and Bob Cox, K3EST, editor of the contest column in the American magazine "CQ." Canadian, Brazilian, Japanese, and English callsigns abounded. Our group was very popular. Many people who had known each other over the air for decades met in person for the first time.

(Continued)

Before the competitions, Vasiliy Bondarenko and I were kindly taken around to the operating locations of the Soviet sportsmen by Bruce Landis, WA7YEJ [WA7YFJ], in his stylish Buick.

The first position, from which Mikhail Zavarukhin, UWØCN, and Yevgeniy Stavitskiy, UWØCA, were to operate, was in a small house on the side of a hill with a twin quad on the roof. They were both concerned -- the antenna was low and the north and northeast were practically closed off in the direction of Europe. They seemed to have mastered the transceiver.

Two hours later, after the competitions had started, we pulled up to a house with a tri-band "MOSLEY" antenna mast. The antenna was OK for everyday communication but not for a championship. Konstantin Khachaturov, UW3AA, and Yuriy Donskikh, UA9SA, were to operate from here. Kostya Khachaturov was unhappy. Replies were poor and the rate was low...

Two hours later, we got to the house of Chip Adams, K7LR, the best seen thus far. A five-element "monobander" and a three-element 40m antenna. Vladimir Umanets, UW9AR, was working c.w. at a good pace, and Yuriy Kurinyy, UA9AM, was "spotting." Kurinyy said things were going poorly on account of a transformer on the street. At the beginning of the contest there had been nothing but a 9+ crackling sound on all bands!

The last position was at the home of the Lewis couple, Mary, W7QGR, and Harry, W7JKJ [W7JWJ]. Following the earthquake in Armenia [7 December 1988], they donated HF equipment to be used for rescue work. Their house is situated on the slope of a hill and is also closed in from the north. Besides, in the same direction there are high-voltage transmission lines at the same height as the antennas. I felt sorry for Georgiy Rummyantsev, UA1DZ, and Vladimir Gordiyenko, RB5IM. Some evil law dictated that all four positions of the Soviet team were far from ideal. We went into the Lewis house. Sacrificing his rate of contacts with Americans, Georgiy was spending a lot of time looking for multipliers. As I suspected, the log indicated that Europe wasn't coming in, there were no Japanese, and 15m was closed. As at each of the stations, a computer was installed, on which Harry entered information on contacts made, for later use by the judges.

As the championship was coming to an end, the serial numbers being given out were passing 1000 and weren't very different from one another. Multipliers would determine the outcome. Now everything was up to the judges...

In the morning, we boarded busses and went as guests of Portland radio amateurs to Oregon. On the way, anyone could take the American exam for a transmitting license. Morse code is OBLIGATORY!

The procedure for taking the exam is extremely simple. Just prepare for it using special ARRL publications and take it before three volunteer examiners. It wouldn't be a bad idea if we adopted this practice. Lots of people wanted to take the exam, even Marti Laine, OH2BH. Harry Lewis said the event could qualify for the Guinness Book of Records -- representatives of 15 countries taking exams for American amateur licenses, in a moving bus!

Finally the results came out of the computer: John Dorr, K1AR, and Doug Grant, K1DG, were named champions; Chip Margelli, K7JA^s, and Mike Wetzel, W9RE, took second place; Bob Shohet, KQ2M, and Jeff Steinman, KRØY, took third place.

Yuriy Kurinyy, UA9AM, and Vladimir Umanets, UW9AR, took ninth place, UA1DZ and RB5IM eleventh, UW3AA and UA9SA seventeenth, and UWØCN and UWØCA eighteenth. At first glance a depressing result, but not all that bad taking into account all the obstacles the team had to overcome.

Much sadder, it seems these were the last Goodwill Games. The Americans have lost 30 million dollars each of the two times they organized the games, and they don't support unprofitable events.

Our own championship isn't very expensive and I think it will be possible to hold it annually. I'd like to hope this meeting wasn't the last.

SRAM-028

"50 YEARS AGO . . ."
by S. Meshcheryakov, Moscow

The first All-Union Contest of Radioamateur-Radiooperators in our country was held in June 1940. I was a member of the Red Army team.

We knew of course that in case of war the army⁹ would need thousands of qualified radio operators. Nonetheless, our army had practically none when the war against the fascists began.

Our uncontrollable spy mania of the time imposed restrictions on going on the air and consequently on the development of amateur radio. As of 1946, we had only 47 collective stations and 114 shortwaves in the country. By comparison, at the time of World War II, the USA had thousands of shortwavers, who became an invaluable reserve of radio operators for the American army⁹.

"AND AGAIN ABOUT QSL'S"
Comments on Letter from N. Mendeleyev, UA1CGF
by Vera Stepanovna Sviridova, Chief, QSL Bureau
and Nikolay Valentinovich Kazanskiy, UA3AF,
Dept. of Radiosport, Central Radio Club

Due to repair of a post office the QSL bureau couldn't send out QSL cards at all but could only receive them. By the time the post office reopened, almost two million cards were ready for dispatch. Unfortunately, the post office will accept only three sacks of cards a day, at which rate it will take about four months to get rid of the backlog.

The volume of mail was expected to diminish after amateurs were given permission to send QSL cards directly, but for some reason the volume has actually increased. Every worker at the QSL bureau, and there are only eleven of them, processes 10 to 12 thousand cards a day. The work is monotonous and tiring. The pay is low so turnover is high.

¹A detailed account on the World RadioSport Team Championship, by John Crovelli, W2GD, appeared in QST, October 1990, pp 43 - 46.

²The U.S. callsign presumably resulted from taking the amateur exam described in the article.

³Probably a reference to the U.S. travel regulations under which roughly the same percentage of U.S. territory was closed to Soviet citizens as that of USSR territory closed to travel by foreigners.

⁴The term "stagnation" ("zastoy") usually refers to the Brezhnev years. An earlier article suggests Ledenev wrote Yegorov and Price in around 1985 or 1986. Gorbachev came to power 11 March 1985.

⁵Admiral Georgiy Mikhaylovich Yegorov was replaced as Chairman of the Central Committee of DOSAAF USSR by Colonel General [three stars] Nikolay Nikiforovich Kotlovtssev on 20 October 1988.

⁶Apparently a reference to an over-the-air event sponsored by QST and RADIO and held 9 April 1989.

⁷Rumyantsev has since become a Silent Key, according to an obituary in Sovetskiy Patriot of 17 December 1990.

⁸K7JA participated in the 2nd Malyy Vysotskiy (4J1FS) expedition in May 1989.

⁹In Russian, "army (armiya) is used both in the general sense (all branches of the armed forces) and in the specific sense (ground forces only). The present context suggests the general sense.

□ □ □

MOTOROLA RADIOS

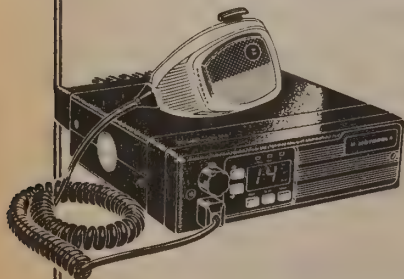


<u>M100</u>	VHF 136 - 162 MHZ DASH MOUNT 25 WATT 2 CHANNEL	
	MOBILE WITH PL/DPL/CSQ PROGRAMMED ON CHANNELS	\$437.00
	45 WATT	\$537.00
<u>M208</u>	VHF 136 - 162 MHZ DASH MOUNT 25 WATT 8 CHANNEL	
	MOBILE WITH PL/DPL/CSQ PROGRAMMED ON CHANNEL	\$528.00
	45 WATT	\$628.00
<u>M216</u>	VHF 136 - 162 MHZ DASH MOUNT 25 WATT 16 CHANNEL	
	MOBILE WITH PL/DPL/CSQ PROGRAMMED ON CHANNELS	\$618.00
	45 WATT	\$718.00
<u>P100</u>	VHF 136 - 150.8 MHZ 5 WATT PORTABLE W/CHARGER	
	2 CHANNEL WITH PL/DPL/CSQ PROGRAMMED ON CHANNEL	\$448.00
	6 CHANNEL	\$538.00
<u>P200</u>	VHF 136 - 150.8 MHZ 5 WATT PORTABLE W/CHARGER	
	2 CHANNEL WITH PL/DPL/CSQ PROGRAMMED ON CHANNEL	\$595.00
	6 CHANNEL	\$695
<u>P200</u>	UHF 438 - 470 MHZ 4 WATT PORTABLE W/CHARGER	
	2 CHANNEL WITH PL/DPL/CSQ PROGRAMMED ON CHANNEL	\$695.00
	6 CHANNEL	\$795.00

Above units carry in depot parts and labor warranty of 3 years.
Delivery within 10 days after receipt of an order.
Prices do not include sales tax or shipping charges

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<u>T74RTA3803</u>	100 WATT UHF 450 - 470 MHZ MICOR MOBILE WITH WIDE SPACED TRANSMITTER, PL, AND ALL ACCESSORIES RECONDITIONED	\$395.00
<u>H44AAU3180N</u>	MX350 5 WATT UHF 450 - 470 MHZ PORTABLE WITH NEW BATTERY AND ANTENNA RECONDITIONED	\$295

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Meet Our Leaders

Widow's Assistance Coordinator Bob Murnane- N5QLB

Bob Murnane - N5QLB has recently assumed the responsibilities for coordinating the FAR Widow's Assistance Program. He is a fairly recent newcomer to Amateur Radio but he certainly is demonstrating considerable dedication to our Service. He is now looking for "a few good men" (or women) to help him carry out an effective Widow's Assistance program for the Foundation.

Bob was first licensed in October, 1989 after meeting some Hams while cruising in the Bahamas. He was impressed by their tales of the benefits of their wonderful hobby and they convinced him he didn't really need a shack full of equipment to participate. He earned his Novice license while on the cruise and then upgraded to Tech in Ft. Lauderdale, FL. He now lives in Easton, Maryland.

"Being new in Ham Radio and the area, I subscribed to Auto-Call to find out where clubs are and other information. After reading (the appeal for help on the Widow's Assistance Program) in the December issue, I called Phil Russo - N3GDD and just asked about the program. The next thing I knew I was meeting with some Foundation officers. They bribed me with coffee and cookies and I discovered I had just volunteered to coordinate the program!

"I know it will be hard to fill the shoes of Bob Henkel - NA3A, who performed this task for several years but, with the help of everyone, I will try. I'm now looking for a representative from each club in the area to help so that no one person will have to do the whole job. This will be a basic start. If anyone calls me for assistance I can then contact the nearest local club representative and suggest things to do. If the deceased had any club affiliation, we would start there. We would make arrangements to meet with the widow/family member to see what equipment is there and arrange for an inventory of what might be sold through ads in the Auto-Call, at hamfests, etc. We will not attempt to do testing and reconditioning of equipment and will not get involved with towers and antennas - other than advertising them." (Free advertising of estate equipment handled through the Widow's Assistance Program is provided in the Auto-Call for a reasonable period of time.)

"If all clubs will help, it will not take much time from any one person. Let's all give a little back in return for all the benefits we have received. Get involved. And I'm open to suggestions. Anyone willing to help, please contact me at 301-820-9432, The address is 712 Lomax Street; Easton, Maryland, 21601."

FOUNDATION FOR AMATEUR RADIO Widow's Assistance Program

The Foundation's Widows Assistance Program has been in operation for many years and has accomplished a great deal for the families of our Silent Keys. The program offers to help widows (and other family members) evaluate and dispose of radio equipment in Amateurs' estates. Listings of Estate Sales are carried in the Shack Sales of Auto-Call free of charge and major items are offered for sale at local Hamfests. No fee or commission is charged the families.

Interested parties should contact a local Foundation member club or call the Widow's Assistance Program directly. Call chairman Bob Murnane - N5QLB at 301-820-9432

The address is 712 Lomax Street; Easton, Maryland, 21601.

The Summit Amateur Radio Association
Present

The 3rd Annual Carroll County Hamfest & Computer Show

Sunday April 21, 1991

at the Carroll County Agricultural Center,
Smith Ave., Westminster, Maryland

Admission - \$5.00

All Tables - \$10.00 • Tailgating - \$5.00 (One Space)

Wall tables have outlets. Dealers must supply cords for center table power.
Dealer Setup: Saturday April 20, 12 noon to midnight

Gates Open at 8:am

Event held rain or shine • 130 Tables Indoors

An ARRL
Sponsored
Hamfest

Tables the Day of the
Event are \$15.00
Large Tailgating Area

Food and
Drink
Available

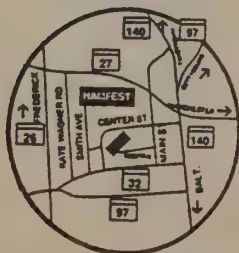


Table Reservations: Call or write: Advance Tickets
S.A.R.A. P.O. Box 341 • Randallstown, MD 21133
Tim West, N3DRB, 992-7745 • Al Parker, KS3L, 747-2076

Silent Keys

Steve Giannakis, K3KWV, of College Park, MD died February 12 after a long kidney illness. He was 72 and had been an Amateur Radio operator for almost 50 years. He was Secretary/Treasurer of the Green Mountain Repeater Association from 1975 to 1988 when he retired due to poor health. He had also been active in the Prince George Wireless Association since 1973. Until a few years ago he was an active member of Air Force MARS, never failing to check in on the CW nets. He was quite active on CW in the HF bands. Steve served on the Edmonston Town Council from 1962 to 1972 and was president of Potomac Automotive Warehouse in Herndon, VA. from the early 1970s until he retired in 1987. After his retirement he volunteered two days a week at Prince Georges County Department of Aging. He is survived by his wife, Mary; two sons and a daughter.

(Submitted by W4MLR)

Special Events

April 6 - 7 **Greater Baltimore Hamboree & Computerfest, Timonium Maryland**

April 12 - 14 **W3NAN, the NASA Goddard Amateur Radio Club**, the home of the Space Shuttle retransmissions, will operate from 1100Z on Friday April 12 thru 1712Z April 14 on 3860, 7185, 14295, 21395 and 28395 KHz. This Special Event station will commemorate the 10th anniversary of the first space shuttle mission. For certificate, send QSL and SASE to: Shuttle Special Events; GARC, P.O. Box 86; Greenbelt, MD 20770.

April 13 **JK4YF, the Fort Pierce (FL) Amateur Radio Club**, will operate a Special Event to commemorate the 4th Annual Trail Ride of the Florida Cracker Trail Assn. The station will be operating from 1400Z to 2100Z April 13 using the 40, 20, 15, and 10 meter phone bands, including the Novice portion of 10 meters. For certificate, send QSL and a large SASE to FPARC; P.O. Box 0004; Fort Pierce, FL 34954.

May 17 - 19 **ARRL Atlantic Division Convention & Rochester Hamfest**

May 18 **K4AF, the Pentagon Amateur Radio Club station**, will run an Armed Forces Day Special Event on Armed Forces Day. For a QSL, just send an SASE with your card. For certificate, please include \$1.00 to cover our postage and handling costs. The station will be on all day May 18 and will concentrate on 35 KHz above the bottom of the cw and phone segments of each band.

May 18 **WA3PJQ, The Maryland Mobileers Amateur Radio Club** will be operating a Special Event from aboard the submarine USS Torsk during Armed Forces Day to honor the Submarine Service. The station will be on the air from 1400Z to 2100Z on 7.240, 14.240, 21.340, 28.340 and 146.805 MHZ. For certificate, PLEASE send SASE to MAARC; P.O. Box 935; Severn, MD 21144.

May 26 **Memorial Day Hamfest, Howard County Fairgrounds**

ANNOUNCING! THE 1991 GREATER BALTIMORE HAMBOREE AND COMPUTERFEST.®

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MARYLAND STATE FAIRGROUNDS
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Many Show Special Bargains

Save 10% to 90% • Acres of Free Parking • Good Food

OUR 20TH YEAR!

ADMISSION \$5.00 FOR BOTH DAYS

Show is open 8 a.m.-5 p.m. on Saturday & 8 a.m.-4 p.m. on Sunday

SHOW WILL BE HELD IN ANY WEATHER!

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Annual Spring Banquet

Sponsored by Foundation For Amateur Radio and Local QCCWA Chapters

For All Area Amateurs

6 April, 1991

**Bethesda Officers' Club
Naval Medical Center**

8901 Wisconsin Avenue; Bethesda, Maryland

SPEAKER

Ron Parise, WA4SIR

Astronaut on Space Shuttle STS-35

Make your Reservations Early

Table assignments are made in the order in which reservations are received
Early applications take the best seats.

Club or group reservations will be available for tables of ten.

Select a spokesman for your group and let him order the reservations.

Deadline for advance reservations is March 30

ADVANCE RESERVATIONS

\$20 per person. Tickets at the door (without reservations) - **\$22**

This includes dinner, gratuity, tax, and parking

PICK UP YOUR TICKETS AT THE DOOR THE NIGHT OF THE DINNER

Tickets will be mailed only upon request and receipt of SASE

No refunds on "No shows"

CASH BAR OPENS 7:00 p.m

DINNER WILL BE AT 8:00 p.m.

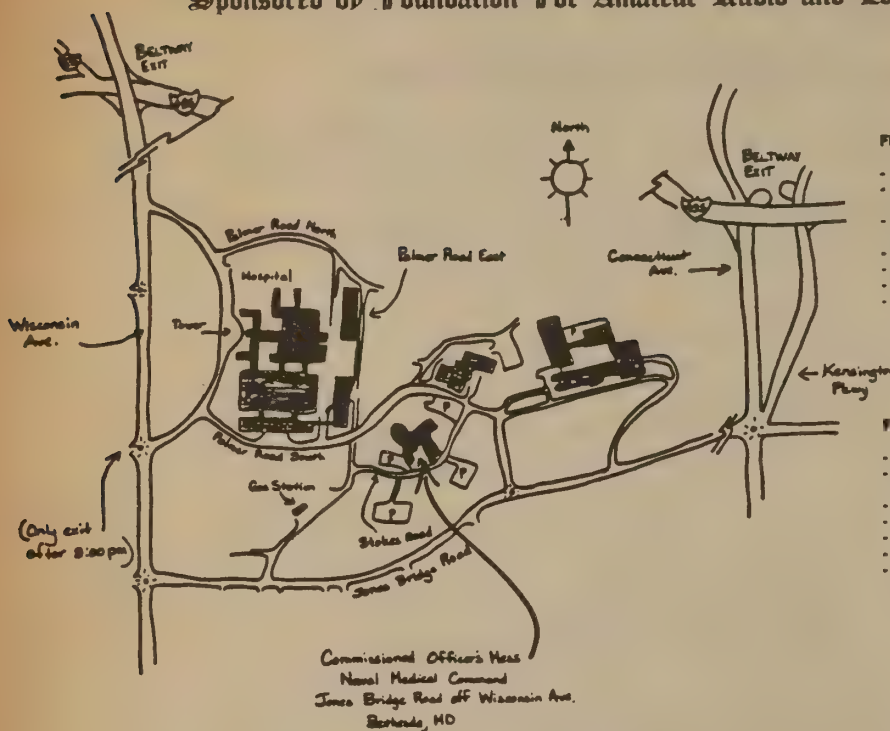
Make remittance payable to
Foundation For Amateur Radio

Mail Reservations to

**Tony Young, WA3YLO
12016 Long Ridge Lane
Bowie, MD 20715
Phone (301) 262-1917**

Annual Spring Banquet

Sponsored by Foundation For Amateur Radio and Local QCCWA Chapters



FROM BALTIMORE:

- Take 85 to 485 (Silver Spring).
- Take CONNECTICUT AVENUE Exit. (The sign will read KENSINGTON - CHEVY CHASE).
- At the light, make a LEFT onto CONNECTICUT AVENUE towards CHEVY CHASE.
- Make your FIRST RIGHT at the light onto JONES BRIDGE ROAD.
- Turn RIGHT at first light on JONES BRIDGE ROAD.
- Make a LEFT at STOP SIGN.
- At the next STOP SIGN, make a LEFT (STOKES ROAD).

CLUB WILL BE ON YOUR RIGHT-HAND SIDE.

FROM VIRGINIA:

- Take 485 EAST towards Baltimore.
- Take BETHESDA, WASHINGTON Exit. That will be WISCONSIN AVENUE.
- Go thru 2 traffic lights.
- Make your NEXT LEFT onto the base.
- Make NEXT LEFT onto PALMER ROAD NORTH.
- Make Right at the 1st STOP SIGN (PALMER ROAD EAST).
- Make Left at the 2nd STOP SIGN (STOKES ROAD).

CLUB WILL BE ON YOUR LEFT-HAND SIDE.

Park in any area marked "P".

1991 Annual Spring Banquet April 6

Name _____ Call _____

Guests Names/Calls _____

Address _____

City _____ State _____ Zip _____

Enclosed is \$ _____ for _____ reservations at \$20 each

Request Group Seating for _____ people. Names attached.

Make remittance payable to
Foundation For Amateur Radio
Mail Reservations to

Tony Young, WA3YLO
12016 Long Ridge Lane; Bowie, MD 20715
Phone (301) 262-1917

Foundation for Amateur Radio Ham of the Month

**Sharyn Duffin - KA3DOF
A DXer with a Difference**

If you tune the HF bands, particularly the DX areas of these bands, you will probably come across "KA3 Delta Ocean Foxtrot." This is the call of Sharyn Duffin, a Rockville resident and DX chaser. Look in your February QST on the page of the DX Century Club Awards. A little way down the page you will find: "KA3DOF/106." As of this writing, Sharyn has 237 worked and 219 confirmed. She got her Novice license in 1979 and her Extra class ticket in 1989.

But there is something else about Sharyn that makes her "A DXer with a Difference." She has been blind and a paraplegic since her early teens. Her HF rig is a TS-930S with voice synthesizer, her 24-hour clock is a "talking clock," and her log is her tape recorder. Her antennas include a Carolina Windom and Mini-quad. The rotator for the Mini-quad is marked with "highlighter" so her fingers can read the beam headings. If you have ever worked a contest or a DX pile-up, do you remember how it seemed that there were too many things to juggle so quickly? Then think about having to punch a few extra buttons to have your rig "speak" the frequency and your clock "talk out" the time, and at the same time make sure your tape recorder is recording your log.

It all began in 1977 when Sharyn's mother gave her an AM/FM radio with a short wave band and VHF. She listened to the 146.64 repeater and the simplex frequency being used by the Montgomery County RACES and became quite excited when she heard the RACES crew deal with the snow emergency which had them stranded at their command post. She was so impressed with the public service performed by the Radio Amateur in this event and the camaraderie displayed among them she immediately wanted to become a part of it.

Sharyn's mother mentioned her daughter's new interest to a co-worker, John Singleton-WD4PXU, who has just received his Ham license. He sent Sharyn a copy of "Tune in the World," and before long the word began to spread. It seemed everyone wanted to help. Griffin Childs - K3AH sent her a code practice tape and one of her "readers" gave her a practice key. Together, they practiced the code and developed some proficiency but they weren't making much headway with the theory. So in the spring of 1979 Sharyn registered in a Novice class sponsored by the Montgomery County Recreation Department and conducted by instructor George Daley - W3WU. She soon passed the code test and George and Ed. Hand - KB3OB came to her house to give her the theory part of the Novice examination. Roger Kaul - K3TM provided a rig and installed the equipment and an antenna to get her on the air with 15 to 40 meter capabilities.

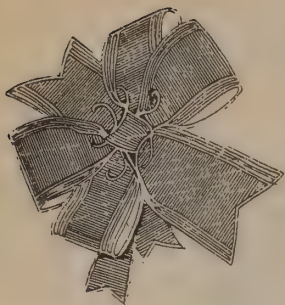
Anxious to upgrade, Sharyn enrolled in the next General class scheduled by the Recreation Department and taught by Howard Lefkowitz - WA3VEZ. Her uncle worked at the U.S. Post Office where he knew Ashley Givens - WB3KXI and Jackson Davis - KB3KI. Both of them were eager to help. Sharyn soon got her Technician class license but the code was still a bit of a problem. She and Ashley practiced code over the telephone nearly every day and she concentrated on working the CW bands, increasing her code speed. Then she worked her first DX, a station in Lithuania, and realized that, hey, this CW is not so bad after all. She had WAS on CW just a few months later! In August of 1981 she passed her General class license and she was now ready to invest in a HF rig of her own. Shep - WB3KIC (who is also a blind operator) assisted her in selecting the kind of gear that would best suit her needs. Now, with an Extra class license and 213 countries worked, Sharyn says, "I have been around the world with KA3DOF."

On March 15th Sharyn was honored with an award by the Montgomery County Office of Minority and Multi-Cultural Affairs for her services to the community, including Amateur Radio.

Our sincere congratulations to KA3DOF. Happy DX hunting, Sharyn.

Submitted by Leo - KA3TGY and Elmer - K4EUX

Desert Storm is now Desert Peace



We welcome home our Hams who have been serving in the Gulf. We have learned about just a few, so far, and would like your help in adding to this list - until all are safely home again.

Clair Allen - AA4KD, Vienna, VA
Chaplin John Hoffman - KA/DGI, Springfield, VA
Richard Goodwin - N3CDH, Annapolis, MD
Tom Lufkin - WA4DAX, Pentagon Club
Larry (Lou) Lewis - KØRI, Woodbridge Club

Journalist Ken Miller, II, WH6CBL of Fairfax, VA went to Saudi Arabia for Gannett News Service on the first day of the war - and is still there. Ken is the son of K6IR.

There must be many more of our local Amateurs who have served in Desert Storm. We would like to honor them. Please send information to Auto-Call.

Students Experience Amateur Radio In Rockhill Elementary School Special Activity



The 20 Meter Bunch

Students Joey Reville, Mike Ford, Mike Hurley, Nikki Moore
Center John Hughlett, N4WRT

About 20 youngsters in the 3rd through 5th grades recently participated in a special Amateur Radio activity at the Rockville Elementary School in Stafford, Virginia. See more details in the Guest Editorial on the next page.

Guest Editorial

Rockhill Elementary School

Jerry Mullinix, KC4OUN

I read Phil Russo's February Editorial with interest. As a public school educator and ham radio mentor of young people, I firmly believe that the key to success in nurturing our youth's interest in Amateur Radio lies with those among the Amateur Radio ranks that would assume an "Elmering" role. The public school offers an excellent opportunity to recruit and "groom" new Amateurs. However, the success of a program implemented in the school depends on volunteer hams that are willing to dedicate their time and energy to "adopting" one or a few children as their apprentices. School clubs or classes that are of substantial size (as ours, for example) are only effective in developing an interest in new initiates. Their further development depends on "elmers." The A.G. Wright Junior High and Rockhill Elementary School Amateur Radio clubs are newly formed this past year with about fifty kids that are members of the two clubs. We draw some of our support from the Stafford County Repeater's association and Fredericksburg hams, but need a whole lot more support to realize the potential of leading these children into a wonderful, life-long hobby.

Recently, we held a contest and sleep-over for each of the clubs here at the school. Between the elementary and junior high clubs, over thirty kids participated. The purpose of the sleep-overs was to provide the kids with an intensive period of exposure to Amateur Radio operations under semi-contest conditions. We also wanted to sponsor an evening activity wherein adult licensed Amateurs from throughout the Northern Virginia area could feel more free to join in and participate. We were very pleased to get the support of three area Amateur Radio retailers in not only advertising our special event contest but also in donating small door prizes for the contest winner.

The elementary club sleep-over involved about twenty kids in the third through fifth grades. Five licensed adults supervised 80-meter voice, 80-meter CW, 40-meter CW and 20-meter voice operating positions. Teams comprised of four kids were paired with each adult operator. The teams were given time to organize and assign jobs for each team member. Adult control operators were instructed to let the kids make the calls and log all information relative to contacts. The 80-meter voice team, with Marilyn - KC4STH in charge, won first place with over 25 contacts in a two hour contest period. The 20-meter team won the DX award with a Scandinavian contact.

The junior high sleep-over involved about ten kids in the sixth through eighth grades. Two of these kids, Marjorie - KC4SRA and Jeff - KC4SZN had recently become Novices. Two licensed adults supervised four operating positions on 80-meter voice, 80-meter CW, 40-meter voice, and 20-meter voice. The 20-meter voice team won this contest with over twenty contacts in two hours. See the picture on page 32.

Though we had hoped to attract more adult ham participation, we were very pleased to have the help of John - N4WRT, Marilyn - KC4STH, Fred - N4COU, and Adam - N6YUG during the contest period.

Staff writer Leslie Moore from the Stafford County Sun participated in the second sleep-over and a fine article and picture appeared in the January 31 issue of the newspaper. We are now planning two "Field Day" activities on the school grounds during the first week of June and would really appreciate some help.

It is our hope that you may publish some of this letter with the objective of encouraging those in the local Amateur Radio community who would like to be "elmers" to some our budding Amateurs or simply help out in upcoming activities.

Jerry Mullinix - KC4OUN
Counselor

The Foundation For Amateur Radio



Washington, DC

SCHOLARSHIPS

36 Scholarships Offered

For Immediate Release

THE FOUNDATION FOR AMATEUR RADIO, INC., a non-profit organization with headquarters in Washington, D.C., plans to award thirty-six (36) scholarships for the academic year 1991 - 1992 to assist licensed Radio Amateurs. The Foundation, composed of fifty local area Amateur Radio Clubs, fully funds five of these scholarships with the income from grants and its annual Hamfest. It administers, without cost to the donors, seven (7) scholarships for the Quarter Century Wireless Association, four (4) for the South Milwaukee Amateur Radio Club; three (3) each for the Baltimore, (MD) Amateur Radio Club, the Radio Club of America, and the West Allis Radio Club of Milwaukee, (WI); and two (2) each for the Dade (FL) Radio Club, the Amateur Radio News Service, and the 10-10 International Net. It also administers one (1) each for the Richard G. Chichester Memorial, the Young Ladies' Radio League, the Columbia (MD) Amateur Radio Association, the Frederick (MD) Amateur Radio Club, the Vienna (VA) Wireless Society, and the Kevin B. Perdue Memorial.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$2000 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs. Clubs are encouraged to announce these opportunities at their meetings, on their nets, during training classes, and in their club newsletters.

Additional information and an application form can be requested by letter or QSL card, postmarked prior to May 31, 1991 from:

FAR Scholarships
6903 Rhode Island Avenue
College Park, MD 20740

The Foundation for Amateur Radio, incorporated in the District of Columbia, is an exempt organization under Section 501(c)(3) of the Internal Revenue Code of 1954. It is devoted exclusively to promoting the interests of Amateur Radio and those scientific, literary and educational pursuits that advance the purpose of the Amateur Radio Service.

Mt. Vernon Amateur Radio Club (MVARC)

Meetings: Second Thursday of Each Month, 7:30 p.m.
Mt. Vernon Governmental Center, 2511 Parkers Ln., Alexandria
Repeater:- WD4PDP/R 146.055 input 146.655 output
Nets: Every Tuesday at 8:00 pm (0100 UTC Wednesday's)
Starts on 2-meter then moves to 10-meter on 28.405
Information: Chris Morrow, W4WYL (703)765-5964
Training Classes: John Forrest, WZ4A (703) 971-3905
Mailing Address: c/o Chris Morrow, W4WYL, 7408 Recard Ln., Alexandria, VA 22307

We don't know who to thank more for February's program -- the guest speakers, Ethel Smith - K4LMB, Carl Gray - W4ACM, John Swafford - W4HU, Tom Sawyer - N4BV, Dick Dickson - KB4DHD, and Chris Morrow - W4WYL, or the man whose idea it was and who worked to make it happen, Ken - N4YGN. To all who came and told us how they became interested in ham radio and told us anecdotes dating back many years and to Ken, THANKS VERY MUCH. It was a fascinating and fun evening.

Besides our guest speakers, we were happy to WELCOME several visitors to the meeting: Chris Martin - N6ADV (Jerry - N4JWG's nephew), Caroline Cronan (Jerry - N4JWG's XYL), Joan Bilger (Glenn - W4OCC's XYL), Dave Clonts - N4JXF, Francis Cowhig (Dave - WA1LBP's daughter), Victor and David Espinosa, Ann Swafford (XYL of guest speaker

John - W4HU), and Gary Lanza. We were DELIGHTED to have Paul Edwards join as a new member (he was our guest speaker at the November 1990 meeting and he is now working toward his ham license).

On February 20, Dave - WA1LBP, Keith - KC4TZJ and Luke - KC4UJS gave a demonstration at Springfield Estates Elementary School. Between 9:00 and 3:00, 229 children in grades 3-6 came in for a short explanation of ham radio. They also participated in short contacts on the air. Great fun was had by all and there are plans for starting a ham radio club at the school.

April should bring lovely flowers, trees loaded with leaves or buds and another great program. The meeting will be back at the Mt. Vernon Governmental Center...COME ONE COME ALL April 11 at 7:30 p.m.

Marci - KM4VM



Fauquier Amateur Radio Club

Meetings: Second Tuesday of each month, 7:30 p.m.
Shadow Lawn Center, Warrenton, Virginia
Repeaters: 147.165 Voice (NZ4N/R), 145.070 Packet Digi (K4LLQ-5)
RBBS: 145.090 W4SQQ Memorial BBS - N4YXW-1
Information: Donald Maziarz, WY2V (703) 347-5745
Mail Address: Route 3, Box 139-C, Warrenton, Virginia 22186

The Fauquier Amateur Radio Association met on February 12. The elected officers for 1991 assumed their positions as follows:

President: Donald Maziarz - WY2V
Vice Pres: Neil Spokes - AB4YK
Secretary: Chuck Gould - N4YXW
Treasurer: George Murphy - WD4KOJ

The highlight of the March meeting was the annual auction. Members and guests brought ham related equipment for sale by auction. The club treasury benefitted from the auction by receiving a percentage of the winning bids. Prior to the auction, potential locations for the Field Day operation were presented to the membership.

The program for the meeting in April will consist of a presentation on SAREX and presentations on several projects by individual club members.

Don Maziarz - WY2V

Pacemakers & Amateur Radio

Controversy continues to swirl around the potential of RF energy to interfere with the operation of a pacemaker. According to an article written by Fran Litke, KB4ZUQ, which was printed in a couple of recent ham magazines,* it appears there is little to worry about.

Litke ran into a great deal of conflicting information when he became a prospective pacemaker recipient. Originally his doctor warned him that he shouldn't go near a Ham Radio! and insisted that no hobby should be an issue where the need for a pacemaker was indicated. Needless to say, Litke wanted more facts and he made an intensive search for information. His conclusion was that most Amateur equipment today is well shielded in metal and uses coax feedline, so any real danger would have to be from the antenna. Measurements made 10 meters in front of a beam antenna operating with a max legal limit of 1KW showed a density approximately 1/10th of the accepted level. (OSHA accepted level for continuous exposure is 10 milliwatts per square centimeter.) He does warn that Amateurs who operate high power at UHF and above may be at a real risk.

Litke mentioned that he has a copy of an excellent article, "Keeping Pace with Pacemaker." He didn't mention the author but he did offer to provide a copy to any potential pacemaker user. He says it has a very good explanation of the how, when, where, and why these implant work. He ends his article with the comment, "I hope that this researched article sets to rest the Ham Radio vs. Pacemaker question."

[The above referenced article appeared in the 9/90 issue of the Platinum Coast, FL "ARS Newsletter" and was reprinted in the Raleigh, NC "RARS Exciter" of 12/90. Litke was at one time Civilian Chief of Radiation Hazards & Measurements group for the Air Force in Europe.]

Montgomery Amateur Radio Club

Meetings:	1st and 3rd Wednesdays of each month at 7:30 p.m. Executive Office Bldg. Montgomery Co. Government Center, 101 Monroe St., Rockville, MD. Park underground on G-2.
Repeater:	146.04 in (Rockville & Germantown)/146.64 out (Rockville)
Mailing:	M.A.R.C., P.O. Box 611, Gaithersburg, Maryland 20877-0611
Information:	Jeff Horlick - KZ3F (301)258-0112; Steve Todd - K2IYQ (301)253-4172
Training:	Ken Nichols - KD3VK(301)977-5405; Dick Hayman - K3DML (301)251-8721

MARC's membership continues to grow and now exceeds 200 members.

A remote receiver for the repeater was installed on the Germantown campus of Montgomery College in January. The Repeater Committee is now at work balancing the two receive sites, but already, the up-county coverage has been significantly enhanced.

MARC is running one of the first classes following the adoption the New Technician class of license by the F.C.C. Beginning February 5 in the Gaithersburg High School, this class is the largest ever taught by MARC, with an average of 25 students attending the twice weekly sessions. Of those students, nearly two thirds are studying the code and hope to pass the 5 w.p.m. test. All will be taking both the Novice and Technician written exams, which will be given by the Laurel Amateur Radio Club on March 21.

As usual, the class is being coordinated by Ken - KD3VK, but many people have participated in the instruction including Don - KA3CTR, Kirk - W3SVD, Claudio - KA3USC, Alan - N3EHD, Al - NW2M, Ken - KD3VK, Dick - K3DML, and Steve - K2IYQ. The code sessions have been taught by Steve - K2IYQ and John - KV3B. Coordination of study materials and the exam was done by John - W3QF, and special guest appearances were made by media star, I. J. Hudson - K9ICF, as well as Cathy - N3ICW, Claudio - KA3USC, and Aaron - N3FBN.

MARC gives classes twice each year. Watch for an announcement in the early fall for the next one. There is no charge to attend classes sponsored by MARC or to take exams with the Laurel examiners.

When the classes are over, the NEATS program helps students get on the air. NEATS collects used but functioning gear to lend to new hams. The program is managed

by Ken - KD3VK, and he welcomes donations of equipment at any time.

The club also maintains a library of ham-related shareware for members. Collected and maintained by Bob - WK3C, the library contains software for code practice, as well as logging, QSL cards, gray-line display and a host of others. Bob brings the library to club meetings and sells programs for \$1.50 per disk. By far the most popular are the code practice programs.

Members of the Novice class were excited last November when astronaut Ron Parise - WA4SIR visited their class. With his space shuttle mission now accomplished, Ron will be the featured speaker at the FAR/QCWA Annul Banquet this month.



Honorary Membership for WA4SIR (R)
Presented by KZ3F

Recent and upcoming meeting topics:

March 6 Lightning Protection

March 20 EME

April 3 AC Noise, with a speaker
from PEPCO.

Bob, - WK3C

Metropolitan Communications Network

Representing Six Meters in the Greater National Capital Area

Meetings: Quarterly, on the second Sunday of the month.
Time and place to be announced.

Repeater: N3AGB/R, 52.250 MHz in; 53.250 MHz out.

On-the-air: Saturdays at 1900 hours.

Mailing: Bob Sporn - WA3GGO, 9927 Cottrell Tr, Silver Spring, MD 20903

Information: Bob Sporn - WA3GGO (301) 434-1719

There has been an increase in activity lately on six meters. Stanley Brigham - W3FTX worked Senegal and Ecuador during a band opening. W. Joe Saunders, Jr. - K3UAL, who already has WAS on ten meters, and who has logged 70 countries towards his DXCC, worked Great Britain, GM0EWX on his Swan 250 and G4AHN on his Kenwood 680-S.

THE SUNDAY MORNING COFFEE NET (50.4 MHz) AM AT 09:00 HOURS EST.

The band openings on February 3rd gave all of us a chance for some DX. Albeit hamfests at time cause a temporary drop in check-ins, so far, we have been doing very well.

MARYLAND FREE STATE SIX METER SIDEBAND NET (50.125 MHz) SUNDAYS AT 1900 HOURS. Having acquired a Swan 250, yours truly will be back - in fact, already is back - on six meters sideband after a long lapse. It was good to be able to participate in a net that included Moravia, NY, and other stations not here-to-fore available on six meters AM.

Bob - WA3GGO

DAYTON HAMVENTION

Are You Going to "Mecca" This Year?

"Mecca" is a term frequently used in referring to the Dayton Hamvention. This is the Flea Market/Hamfest/Convention that attracts around 30,000 people every year and it is a "pilgrimage" that every Ham should make at least once in his lifetime.

This year's event will be April 26 -28 at the Hara Arena & Exhibition Center just north of Dayton. Hotels and airlines are pretty well sold-out a year in advance so be sure to check immediately if you haven't made arrangements yet. For General Information write to:

Box 964

Dayton, OH 45401

(513) 454-1456

Free shuttle busses run continuously between the major hotels and the Arena. Major exhibitors from around the world unveil their newest products at the Hamvention. There are acres of Flea Market space outdoors and still more inside. There are group meetings and dinners, forums and workshops, license examinations and code contests. Don't miss

The Dayton Hamvention.

QCWA Banquet At Hamvention



The Dayton/Cincinnati Chapter of the Quarter Century Wireless Association announces the 1991 Annual QCWA Banquet to be held on Friday, April 26, the first evening of the Dayton Hamvention. Neil's Heritage House has an outstanding meal for us. C.O.D. bar is at 6:30, the banquet starts at 7:30 p.m. EDT.

Speaker

Robert G. Heil, K9EID

Tickets \$15.00 each

Reservations Required

Come join the fun. Membership in QCWA is not required to attend.

For tickets or information contact:

Bob Dingle, KA4LAU

657 Dell Ridge Drive, Dayton, Ohio
Zip 45429 Telephone (513) 299-7114

MADRAS

The Maryland Apple Dumpling Radio Amateur Society Inc.

Meetings: 2nd and 4th Tuesday of the Month - 7:00 p.m.
WKYS Conference Room in the NBC building
4001 Nebraska Avenue, N.W., Washington, DC

Repeater: 444.10/449.10 MHz 145.45/144.85 MHz

Mailing: P.O. Box 2468, Wheaton, MD 20902

Information: Larry Zeicheck, N3GKZ (301) 984-6112

Schedule of Events:

April 9, 1991 - Regular Tuesday meeting at 7:00 p.m. The program will be "Lightning, Part II." Get your shack ready for the storm season! This lecture series continues with an excellent treatment of the Fundamentals and principles of lightning through full practical lightning protection. Giving the presentation: Scott Standiford - W3YTW.

April 23, 1991 - Regular Tuesday meeting at 7:00 p.m. A presentation on the "Amateur Satellites" will be given by Eric Rosenberg - WD3Q of AMSAT.

Club News

The MADRAS Novice class is currently meeting Saturday mornings. Please call Larry - N3GKZ at 301-984-6112 for details if you would like to join.

JOIN US FOR FIELD DAY!: Every year MADRAS enjoys participating in Field Day. We would like to invite anyone who would like to operate during Field Day to join our efforts. Contact John Kingdon - KA3VJH (daytime phone: 301-816-2555) for more information.

MADRAS plans to work the 10 Meter Phone County Hunters Contest, and the CQ WW Prefix Phone Contest. Call John Kingdon for more current information if you would like to operate a contest with us.

The MADRAS 440 repeater is on its way, please stay tuned.

BACK ON THE AIR: The MADRAS Club station is back on the air! Our Linear is now fixed and our Kenwood TS-520 is in place. We have a long dipole for 40M - 80M, a Vertical for 40M - 10M and a 20M - 10M 3-element Beam.

We still have some work to do for our station, if you would like to help us out or use the station please call Larry Ziecheck - N3GKZ.

Upcoming Presentation Highlights:

May 14, 1991 Bio-effects of RF, Nicole Adaniya - N4YKR.
May 28, 1991 VHF/UHF Contesting, Andy Zwirko - KA1GD.
June 25, 1991 Wire Antennas, Ernst Gearels - NQ3X.

A part of each MADRAS meeting is a presentation that is either technical or operating in nature. We have a few programs that we are willing to present to other clubs in exchange for your club making a presentation to us. For more information, contact John Kingdon - KA3VJH.

More information on club activities is available from Larry Ziecheck - N3GKZ.

John - KA3VJH

Pentagon Amateur Radio Club

Meetings Monthly, on the second Wednesday of the month. Noon.
PARC clubroom (5B272), The Pentagon
Repeater: K4AF/R, 444.55 MHz. CTCSS 88.5 sometimes in effect.
Packet: 145.07 Digi - K4AF, Mailbox - PARC, Node - PNTAGN
Mailing: P.O. Box 47063, Washington, DC 20050
Information: David G. Boyd - K9MX (703) 695-2020 or (703) 659-6241 or
William Klein - N4VBW (703) 697-8157 or (703) 590-2546

Now that Desert Storm has been successfully concluded, things should get back to normal at the Pentagon ARC. The best indication that the war is actually over is the number of members appearing again at our informal noon-hour meetings. Even the president has been able to come up again - just in time to enjoy the last couple of weeks before he's replaced at the annual election. The only bad part about the replacement is that he'll also be leaving the Pentagon this summer. Leaving the five-sided "puzzle palace" certainly isn't bad, but it means it will be tough to visit the radio club. His new assignment will be in Bailey's Crossroads at the Army's Operational Test and Evaluation Command (OPTEC), where offices actually have windows!

Paul Bauer, N3DAN, is the big winner this month in the "Did I really do that" sweepstakes. Seems he installed his yagi to optimize his long path performance - which is a tactful way to say backwards. After a brief review of the theory and

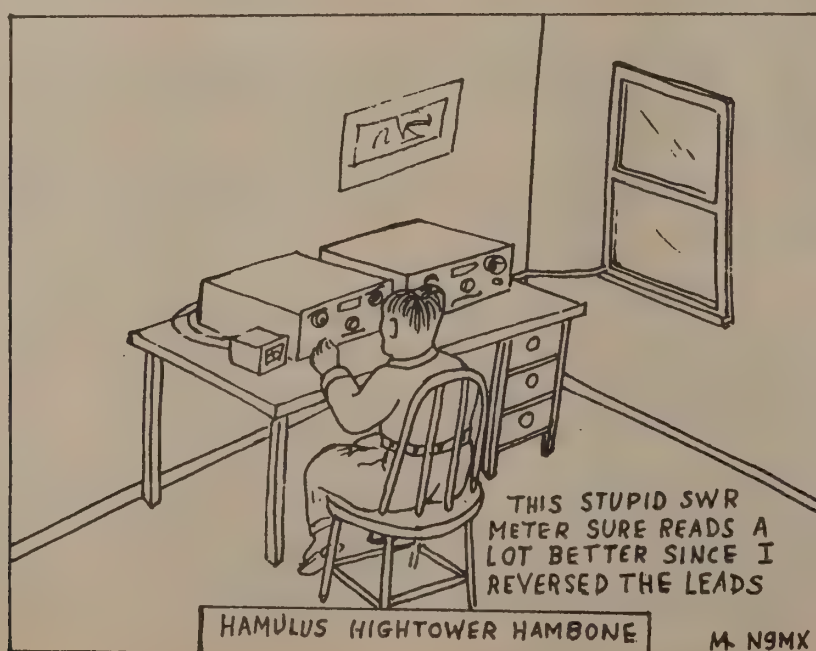
operation of yagis, Paul realized it would probably be best if the shortest element were pointed toward the target . . .

We will again run an Armed Forces Day special event station, and will offer either K4AF (Pentagon) QSL cards to the stations we work, or certificates. For a QSL, just send an SASE with your card and for a certificate, please include \$1.00 to cover our postage and handling costs. The station will be on all day, and will concentrate on 35 kHz above the bottom of the cw and phone segments of each band.

We also need to hear from anyone interesting in working the Marine Corps Marathon in November - especially if they'd like to run packet or ATV in support. Just leave a message for KA3VNE on WA3ZAI.

Oh - and we will shortly be running exams again in the Pentagon. As soon as the building is reopened to the public, we'll start our noon hour testing program again.

Spike



Woodbridge Wireless, Inc

Meetings: 3rd Tuesday of each month, at 7:30 p.m.
Tall Oaks Community Center, Lake Ridge.
Intersection of Hedges Run Drive and Cotton Mill Drive.

Repeater: WB4FQR/R 147.84/24 and 449.9/444.9
WB4GJZ/R 223.18/78

Nets: Mondays, 8:00 p.m. local (0100 UTC) 147.84/24, 223.18/224/78
(the repeaters are linked for the net.)
Wednesdays, Slow CW at 8:00 p.m., 21.164 MHz
Saturdays 9:00 p.m. - in new 10 Meter Novice band 28.460 MHz SSB

Mailing Address: P.O. Box 112, Woodbridge, VA 22194

The Novice/Tech class is progressing nicely. Several hams in the club contribute their time to teach classes...so the work gets spread around. Thanks to all who participate. We had two folks, Charles Deal and Melvin Baker successfully complete their exams for Novice. Charles is a member of the Novice class. We hear he passed his tech test at Vienna. Way to go! Several have their eyes on the code-free Tech license.

As a footnote to last month's happenings, the club was saddened by the death of our aggressive Activities Chairman, Joe Robichaud, W4ADM. Joe did a lot of work organizing hams to support rowing meets on the Occoquan. WWI received a letter from the Northern Virginia Scholastic Rowing Association advising that they are going to name their judges' stand in honor of Joe Robichaud because of the time and effort he gave to the rowing association. A plaque with "Joseph A. Robichaud - Judges' Stand" will be affixed to the entryway to the stand at a presentation ceremony at the first regatta on April 6, 1991.

Larry (Lou) Lewis, KØRI, is now serving in Saudi Arabia. Hams who would like to send him a greeting can send it by mail to: Larry Lewis, 1st Radio Bn. (Ace Detachment), FPO San Francisco, CA 96608-5790.

Dayton Hamvention is approaching and Sherm, WB4RDV has one more space in his camper/RV for the trip. Several WWIers make the pilgrimage each year.

CONGRATULATIONS to all the WWI members that have been working many of the CQWW and ARRL contests during the past few weeks. Ed - KJ4VG, Mike - KA4RRU, Terry - WA5NTI, Ted - N4WYH, and others have been heard calling CQ CONTEST. Special thanks to all the folks that gave WD4KXB, Denis contacts during the CQWW 160M Phone Contest: Larry - KØLB, Bob - K8MLM, Jack - K4HWG, John - N4PKL. We didn't realize we had so many contesters in the club. Keep it up. It's great practice for Field Day.

Related to the Novice class is the slow code practice net. Its on 28.250 MHz, 7 to 8 PM Wednesdays. Everyone is using a straight key and having a ball. Its more good practice for Field Day.

Spring brings back thoughts of rabbit hunting. We mean the electronic bunnies, not the fuzzy ones. Once a regular feature of the WWI calendar, we've not held regular hunts since 1986. We have had a few "live" hunts for interference, etc. Hidden transmitter hunts are great sport in China where they seem to combine them with cross-country running. We're not up to that yet.

Well, that's the news from just south of the Occoquan, where the SWR is low, the antennas are high and QSOs are friendly.

WJ4M

Points to Ponder

"We do not inherit the earth from our parents. We borrow it from our children."

Slogan used by environmentalists

Anne Arundel Radio Club

Meetings:	First and Third Thursdays at 8:00 p.m. Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off Md. Rt 214 near Annapolis
On-the-Air	Thursdays when there is no club meeting, 2030 Local on 147.705/105 Tuesdays at 2030 Local time on 28.410 The Chesapeake Bay Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. Maryland Slow Net (MSN) every evening at 1930 on 3.7170 MHz
Address:	P.O. Box 308, Davidsonville, MD 21035
Information:	Margaret (Holly) Bevan, (301) 923-0229

The Novice class is doing well. We have between 35 and 40 students each Saturday morning, so they appear to be a dedicated group. From their questions, it is evident they are doing their homework. The code practice sessions on Monday and Tuesday evenings are well attended. Two members of the class have already "jumped the gun" and have taken and passed their Novice and Tech tests.

At the clubhouse on February 9th, Dean Alley - NS3V and Bob Israel - WC3I and Oscar Ramsey - NV3G administered 21 exams to 11 persons. Fourteen passed and there were six upgrades. Gordon Davids - WJ3K and Holly Bevan - N3BMB were on hand to help. At this testing session the first applicant for the new no-code Tech license passed both the Novice and Tech tests and is happily awaiting his call. The next testing session will be April 13th.

For the second consecutive year AARC has presented a wall plaque and two runner-up certificates at a grade school science fair. The judging was done after the school judges were finished. Our criteria was "Best Technical Presentation Regardless of Subject". On February 27th, Carter Anderson - N3GRX, Oscar Ramsey - NV3G and Tony Young - WA3YLO ranked more than 200 entries

separately, then combined scores to determine the winners. This is a great community service for any Amateur Radio club. A few clubs do it regularly and find great satisfaction in the activity. Perhaps more clubs will realize the benefits of this community service and "follow suit".

Plans are underway to have the Club's Ham Shack available for general membership use. Walt - N3BFO is working on operating procedures and written instructions for the equipment. Walt is looking for a tuner, hopefully donated, to complete our packet capabilities.

I would like to take this opportunity to express my surprise and appreciation for the honor of being selected the Foundation's "Ham of the Month" in the March issue. It is rather startling to be leafing through a magazine and unexpectedly find one's picture.

Upgrades since last month include: David Hubbard - WD4IEH to Extra, Carter Anderson - N3GRX and Brian Davids - KA3WWI to General, and Cathy Gardner - KA3WKH to Technician. Joe Selby changed his call from KA3WTV to N3IVG.

Holly - N3BMB

Just for Laughs

If you help a friend in need, he is sure to remember you — the next time he's in need.

(ARNS Bulletin 1/91)

Maryland Mobileers

Meetings: First Friday of each month at 1930 hours. Basement of Police C.I.D. Building at Crownsville State Hospital Grounds
Route 178 and Crownsville Road.

Repeater: W3PJQ 146.805 MHz (output) in Millersville

Nets: Mondays - 2030 on 146.805 - Traffic and Information Net
Tuesdays - 2000 on 144.215 - SSB Net
Wednesdays - 2000 on 147.495 - FX Simplex Net

Contact: Bill Dillon - WA3SCW ((301) 551-8972

Address: P.O. Box 935, Severna Park, Md 21144

MMARC has been treated to some fine presentations at recent meetings. In January, WA3YLO spoke on the National Traffic System. In February, W3GOU spoke on the Military Affiliate Radio System, and in March, NT3Z spoke about the Amateur Radio Emergency Service.

MMARC is preparing for its annual Special Event operation aboard the submarine U.S.S. TORSK in Baltimore's inner harbor on Armed Forces Day (May 18). We expect to run two HF stations and one VHF station.

Paul Quirk, a 7th grader, is the 1991 winner of the MMARC S.O.C. (Scientific Creativity and Originality) Award for his entry "Electricity - How do we get it?" in the Science Fair in the Old Mill Middle School (North).

K8JW changed antennas and locations on the tower of the MMARC repeater, bringing coverage more in line with the members' needs and desires.

MMARC recently concluded a Novice class with 12 of the 13 students passing the Novice test and 8 of the 12 passing the Technician test. All twelve were given free membership in MMARC for 1991. Other new members of MMARC include W3DCN, N3DDX, KA3PSO, KA3WZC and WB8YYY.

W3IKO is starting to put together a satellite station.

KO4A is the February recipient and custodian of the MMARC "Warbler" Award. The Warbler Award is presented to the MMARCer who timed out the repeater the most during the previous month.

Bill - WA3SCW

Atlantic Division Awards Sought

Nominations are now being sought for the 1991 awards to be presented at the ARRL Atlantic Division Convention.

"Amateur of the Year" nominees should be outstanding all-around Amateurs from the Atlantic Division with a strong record of service to the Amateur community. An award for lifetime service to Amateur Radio, the "Grand Ole Ham," is open to Atlantic Division OMs and YLs who have been licensed at least 30 years or are at least 50 years of age. New for 1991 is an Atlantic Division "Technical Achievement" award that may be presented to an individual or to a group.

Complete information on the awards and nomination procedures is available from Richard Goslee, K2VCZ, 24 Elaine Drive, Rochester, NY 14623. The deadline for nominations is April 10.

The Atlantic Division Convention is held in association with the Rochester, NY Hamfest.

Metrovision Amateur TV Club

FAST SCAN - COLOR - ATV

Meetings: Quarterly: Call for next meeting time and place.
Repeater: WA9GVK/4 (Video and Audio) 425-431 MHz in; 438-444 MHz out
 Also accessible on 144.970, simplex, audio.
On-the-air: Sundays at 8:00 p.m.
Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, VA 22041
Information: Dick - WB3EPX (301) 439-8135
 Gene - AD3F (301) 774-5307

I want to thank Bernie - WD4O and Skeeter - WA3UDY for picking up the Sunday night ATV net during my recent illness. I appreciate their support and the support of any others who are able to help out during times of need.

All of the members of Metrovision want to congratulate Warren - N4MWU and his XYL Laura on the birth of their son, Scott. Scott came into this world on February 6.

Our sympathies go out to Dave - W3PJM and his XYL Ruth - K3AGR on the passing of Dave's sister, Paula, back in early February.

We have changed the graphics display which announces the Sunday night ATV net. The background is now all black and the lettering is in various colors; some of which flash on and off. We hope this display will be more pleasing to the eyes.

Any other ideas which you may have on making the display better will be graciously accepted.

See you on ATV.

Dick - WB3EPX

The "Considerate Operator's Frequency Guide"

Frequencies that are generally recognized for certain modes or certain activities (all frequencies are in MHz):

160 Meters		40 Meters		15 Meters	
1.800-1.830	CW, RTTY and other narrowband modes	7.040	RTTY DX	21.070-21.100	RTTY
		7.080-7.100	RTTY	21.340	SSTV
1.830-1.840	CW, RTTY and other narrowband modes, intercontinental QSOs only	7.171	SSTV		
		30 Meters		12 Meters	
1.840-1.850	CW, SSB, SSTV and other wideband modes, intercontinental QSOs only	10.140-10.150	RTTY	24.920-24.930	RTTY
		20 Meters		10 Meters	
1.850-2.000	CW, phone, SSTV and other wideband modes	14.070-14.099.5	RTTY	28.070-28.150	RTTY
		14.100	NCDXF beacons	28.190-28.225	Beacons
		14.230	SSTV	28.680	SSTV
				29.300-29.510	Satellite downlinks
80 Meters		17 Meters		29.520-29.580	Repeater inputs
3.590	RTTY DX	18.100-18.110	RTTY	29.600	FM simplex
3.610-3.630	RTTY			29.620-29.680	Repeater outputs
3.790-3.800	DX window				
3.845	SSTV				

ARRL band plans for frequencies above 28.300 MHz are shown in the *ARRL Repeater Directory* and *FCC Rule Book*. For suggested packet frequencies, see *QST*, Sep 1987, p 54 and Mar 1988, p 51.

QST Jan '91

Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

Meetings:	4th Wednesday of each month (except November & December) 8:00 p.m. at Capitol College on Springfield Road, Laurel.
Social:	2nd Wednesday of each month except December. (Call for directions.)
Nets:	1st & 3rd & 5th Wednesday of each month, 8:30 p.m. on 147.54 simplex.
Mail:	P.O. Box 3039, Laurel, MD 20709-0039
Exams:	3rd Saturday of each month, 10:00 a.m. at Maryland Radio Center.
Information:	Bill - KD3EC (301) 776-4083 or Jim - WI3N (301) 725-6829

The Laurel Amateur Radio Club is active in the Laurel area, which we think generally includes most of Northern PG County, as well as the surrounding area in Howard, Montgomery, and Anne Arundel Counties. All Amateurs in "our neighborhood" are welcome to participate in LARC activities.

The LARC is privileged to have as its guest speaker at the March 27 regular business meeting Dr. Ron Parise - WA4SIR, the mission specialist on the last space shuttle. Dr. Parise will be discussing Amateur Radio in space. The time is 8:00 p.m. and the meeting will be held at the Laurel Presbyterian Church, 7610 Sandy Spring Road. Any hams and interested public are invited. Talk-in will be on 147.54 and John Creel's repeater on 147.225 +600, Tone 156.7. The April meeting will be back at Cap Tech as usual.

The annual George Washington's Birthday Marathon Run in the Beltsville Agricultural Center has been supported by the Laurel Amateur Radio Club for about ten years. This year three of our regulars came down with

whatever was going round, but the following people showed up to make the day a communications success. Al - WA3QGA chaired the group and Curt - AL7LQ, in his long-johns, prepared to work outside, ended up inside as net control, ably assisted by Matt (no call yet). Howard - K3IOG and Don - WA4AVU, Cathy - KA3QPU, Mary Ellen - N3FQA, Charles - NEGYD, Alan - N3DUE, and Jim - WI3N spotted themselves around the course, keeping track of the 6 top positions in both male and female categories for the race officials.

The testing sessions at MRC have handled 71 and 74 people, respectively, in January and February and those numbers are expected to continue. Therefore, it is recommended that you pre-register for the test at MRC by calling John Creel if you want to get in and out quickly as possible. John is listed each month in the Volunteer Examiner Cooperative column. His number is (301) 572-5124. Call him after 6:00 p.m.

Jim - WI3N

Foundation Meetings

The Foundation for Amateur Radio meets at 8:00 p.m. on the second Wednesday of each month.

Meetings alternate between Maryland and Virginia:

In even numbered months, meetings are held in Takoma Park, Maryland

In odd numbered months, meetings are held in Alexandria, Virginia

Visitors are always welcome

Membership is open to any Amateur Radio organization in the local area.

Phone (301) 725-5822 for information

The next meeting will be on April 10 in Takoma Park, Maryland
Columbia Union College Science Building Auditorium, Flower Avenue
Talk-in on 147.18

Stafford Amateur Radio Association

Meetings: Weekly, 0730 a.m. every Saturday morning. at the "Nothin Fancy" Cafe on Route 1. All meetings are informal.
Repeater: N4SMP/R 145.27 out 144.67 in. Autopatch for members.
Mailing: c/o George Gautney - N4SMP, 9 Skyview Ct., Stafford, VA 22554-5232
Information: Dick Kirby - W4GFB (703) 720-0406 or George Gautney - N4SMP (703) 659-5720
Packet: 145.07, W4GFB-2

The last month at SARA really hasn't been quite as slow as this column will suggest. What has actually happened is that the SARA correspondent hasn't been around enough to know what is going on, beyond the exam schedule. The next test session is scheduled for the last Friday in March - that's the 29th. It will be held, as always, at the North Stafford High School. To get to the school, take exit 48 West off I-95. You'll see the high school about three miles down on the left.

We're trying to get organized to switch our test accreditation from W5YI to ARRL, so we can't tell you right now what VEC we will be testing under for this session.

Incidentally, the next session - after March 29 - will be on 24 May. See you there.

Spike

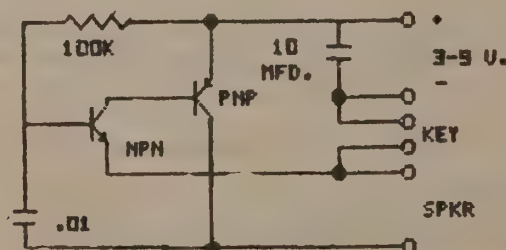
Quick & Simple Code Practice Oscillator

Curtis Goodson, W4QBU

In AARC/OVER, Austin, Tx - Via ARNS Bulletin 1/90

Recently when a friend needed a code practice oscillator, I threw together the 555 circuit from the Handbook. Frankly, I've hear better code from an electric buzzer! So I went back to my favorite CPO circuit, which uses only six parts: an NPN and a PNP transistor, a .01 and a 10 mfd capacitor, a 100K resistor and a loudspeaker of any size. It's simple enough to wire up without any support, but looks nice on a 1/2" by 1" piece of perf. board. Power can be anything from 3 to 9 volts. The tone is better with the higher voltage. Earphones can be substituted for the loudspeaker for privacy.

Almost any transistors will work, even those leaky old germaniums from a junked AM receiver. An audio output type is best for the PNP. The 100K resistor may be replaced with a 500K pot for pitch control. If so, a 1K resistor should be used in series with it to protect the NPN transistor. The CPO will work without the 10 mfd. capacitor, but some batteries will give a weaker and higher tone without it. Here is the circuit diagram.



Vienna Wireless Society

25 Years of Public Service

Meetings:	2nd and 4th Fridays of each month, 7:30 p.m. Vienna Community Center, 120 Cherry Street, Vienna, VA
Repeaters:	K4HTA/R 146.085 in/146.685 out 222.340 in/223.940 out, 448.250 in/443.250 out
Nets:	Every Thursday at 7:30 p.m. on 146.085 in and 146.685 out. Pow-Wow Net Every Night at 9:00 p.m. at 28.400 MHz
Information:	Pat Crosby, KA4FHK (703) 9789-6316 (H); (301) 731-9800 (W)
Training Classes:	Paul Wilkins, AB4CY (703) 560-2779
Mailing Address:	P.O. Box 418, Vienna, VA 22183

WINTERFEST . . . A SUCCESS . . . THANK YOU

Thanks to an excellent group of people, we have once again completed another successful Winterfest™. The final figures are not tabulated as of this date (2/25/91) but will be set out in detail at the first meeting in March. All the committees involved in making Winterfest™ happen will report on their activities as part of the program at the next meeting. Preliminary numbers indicate we did make our budget projections and will be able to continue to support our many community and emergency communication programs.

As Winterfest chairman, I want to personally thank the committee leaders for their efforts on behalf of the club, all the hard work by those who helped, and all those who came out on Sunday.

I also want to mention that a part of our Winterfest™ weekend was the VEC exams that took place on Saturday, the 23rd. Ron - WO2L and his able crew did a professional job with a larger than first expected crowd. I heard only good things from the people I talked to while they were waiting for the test results. I have not heard the final number of participants, but congratulations to all who

upgraded and to all the new Hams. Now we need to be ready to guide and council all the new Hams, including the new Tech+ Hams.

It will be our responsibility to instruct them in the proper rules and procedures. Thank-you to all the VECers for all their work . . . Well done.

Our Annual Banquet will be March 22nd at the Westwood Country Club, with Vern - W4DZI as chairman. Everything is set to have a fun and entertaining evening. QSO and cash bar begins at 7:00 p.m. with dinner at 8:00 p.m. Introductions and awards at 8:45 p.m. Big band dance music to follow.

REMINDER Don't forget we have a 2-meter emergency net that operates on Thursdays at 1930 hours on our repeater frequency, and a 10-meter net that meets every night at 9:00 p.m. on 28.400 with a CW net on 28.395. Please join in with us. We have different net operators on the 2-meter net and Frank - W4NUA has asked everyone to turn in on 10-meters. Paul - AB4CY runs the CW net - a good way to increase your speed.

Pat Crosby - KA4FHK

Replacing a hard disk with a neat stack of credit-card-sized memory cards may sound like science fiction—but it's not. Futuristic flash memory cards are already helping laptop PC makers eliminate heavy hard discs and increase battery life. Though the highest capacity flash memory cards now available hold only 4MB of data, many experts predict that within four years flash memory cards that hold 64MB will give the traditional PC hard disk some well-deserved competition. Flash memory-based cards have many technical advantages over hard disks and other semiconductor technologies. Because they are solid-state devices with no moving parts, they are highly reliable and their 250-nanosecond average access time makes them significantly faster than the swiftest hard disk.

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Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Estate sales for Widows Assistance handled by a FAR club will be published without cost. Since no effort is made to investigate advertisers, no warranty can be implied.

Copy must be received by the 5th of the month preceding publication.

DONATION TO CLUB or MAKE ANY OFFER

Selling Home and Tower Must Go.
Fifty foot windmill tower with Mosley TA33-40K triband beam and 40 meter dipole; HAM-M Rotator. George Willingmyre - K3SZZ (301) 421-1752, Silver Spring, Maryland (05)

FOR SALE: SANTEC ST-144 HT with mobile and wall charger, leather case with shoulder strap, speaker mike, needs new batteries \$140
WANT: HEIL BM5K Boom Mike, single headset for Kenwood and 1980 U.S. Callbook. Please leave message. Greg - KA3DBG (301) 946-6460, Rockville, Maryland (04)

WANTED: Manual for the Hunter Bandit 2000 Linear Amplifier to make copy from. Bob Teitel - W3IDT, Call (301) 654-3484 (Home) or (301) 913-0512 (W) 3305 Glenmoor Dr, Chevy Chase, MD (04)

FOR SALE: SANTEC ST-144 2-meter HT with mobile and wall charger, leather case with shoulder strap, speaker mike. Very good condition. Needs new batteries. \$130
LARSEN PO-150 5/8 wave antenna with mag mount \$10
HUSTLER MO-2 mobile mast \$5
RM20 Resonator \$5
RSS-2 Resonator spring \$2
VP-1 Tri-Band adapter \$1
Dr. QSO Morse code trainer for Commodore 64 \$30
FREE: Used mobile antennas, cellular to Amateur. Some not complete.
WANT: HEIL BM5K boom mike for Kenwood and 1980 U.S. Callbook. Greg - KA3DBG (301) 946-6460, Rockville, MD (05)

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Estate of Gerry Roberts, N3BAK

* Azden PCS4000 2-Meter Mobile Transceiver w/mag mount antenna \$180
* Kenwood TS-130 HF Transceiver \$450
* Kenwood SP-120 Speakers (2) Each \$5
* Kenwood MC-50 Desk Microphone \$40
* DRAKE TV-3300 low pass Filter \$20
* MFJ-900 Antenna Tuner \$35
* Heathkit Cantenna Dummy Load \$20
* Channel Master CM-9512 Rotator, fully automatic control \$95
* Panduit Ty-Rap tool \$5
* Heavy duty tripod-style Roof Mount, used to support small beam (TA-33 Junior) \$15
* Regulated Power Supply, 13.8 VDC, 20 A \$60
Al Taylor - KN3U (301) 327-1819 in Baltimore, MD or Ron Fineman - W3GIS (301) 460-1737 Rockville (3)

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Howard Mills - W3HM, RT#3, Box 712, Harpers Ferry, WV 25425. Telephone: (work) 202-647-2428 (home after 7 p.m.) 304-876-6483. (08)

WANTED: UTC Linear Standard transformers such as LS5S, LS58, etc. Tube Hi Fidelity amplifiers. A good tube preamp. Mark van Roojen, 127 Moore Street, Princeton, NJ 08540 (609) 932-8171. (04)

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WORLD RADIO, Amateur Radio's monthly newspaper can be delivered to your doorstep for only \$14 per year (\$23 overseas). Get the latest on how your fellow amateurs use their hobby to help others. Regular features are Contest and Hamfest announcements, Aerials, Amateur Satellites, Continuous Wave, Digital Bus, DX World, Search & Rescue Communications, FCC Highlights, Mobile, New Products, Propagation, QCWA, QRP, Station Appearance, Traffic, VE Exams, 10-10 International News. Send your subscription to **WORLD RADIO**, 201 Lathrop Way, Ste. D, Sacramento, CA 95815. (Swp)

REMEMBER the FAMOUS BRATS Maryland HAMFEST and COMPUTERFEST, Sunday, July 28, 1991 at the Timonium Fairgrounds Timonium (Baltimore) Maryland (301) 583-9147 or write The BRATS P.O. Box 5915; Baltimore, MD 21208

WANTED: HAM EQUIPMENT AND OTHER PROPERTY. The Radio Club of Junior High School 22 NYC, Inc. is a nonprofit organization, granted 501(C)(3) status by the IRS and incorporated with the goal of using the theme of ham radio to further and enhance the education of young people nationwide. Your property donation or financial support would be greatly appreciated and acknowledged with a receipt for your tax deductible contribution. As 1991 begins, please look over whatever unwanted equipment you may have and call us. We will pick up or arrange shipping. You will receive the tax deduction, but most important, the privilege of knowing that your gift really made a difference in the education and upbringing of a child. Meet us on the **WB2JKJ CLASSROOM NET**, 1200 UTC on 7.238 MHz. We hope to see you at Dayton Hamvention. Write us at: **THE RC OF JHS 22 NYC, INC.**, P.O. Box 1052, New York, NY 10002. 'Round the clock **HOTLINES:** Voice (516) 674-4072, FAX (516) 674-9600 (02 Pd)

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Asking \$215,000. Available May 1st. Call Jeff Hutchinson - W4PBC
Phone (703) 451-2818 or (703) 644-6584 and leave message.

Address: 8503 Etta Drive, Springfield, VA 22152

Directions: West on Old Keene Mill Road (Rt 641) four miles from Springfield Mall. Left on Huntsman Blvd. Second left on Houndmaster, second left on Powderhorn, then third left on Etta Drive to 8503. Quad beam on small tower behind house.

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- Halliscratcher SX-25, with spkr, bo825
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- Knight BC/SW table radio, circa 1938, (gets HCJB with bent coat hanger) \$20
- Sears 5 h.p. rototiller \$140
- Panasonic AM/FM Stereo, 40W \$25
- Desk, steel office type, 60" x 30" 4 drawers & file drawer \$75
- 16 mm Bell & Howell film projector. JAN-model, excellent \$50
- GEM tri-bad quad beam \$50
- 13" B&W Portable TVs, RCA & GE from departed kids each \$5
- Roll-top desk, antique green, with two top units: one for ham radio, one for office use \$200
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- H-P 141S storage oscilloscope. In spectrum analyzer mainframe, with manuals \$35
- Miscellaneous speakers, coax, skis, sleds, furniture and other items not yet uncovered.

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FOR SALE: ICOM 701 Transceiver with power supply and microphone . . . \$450

FOR SALE: ICOM IC-R71A \$700
Both in mint condition. Elmer - K4EUX (703) 979-1669, Arlington VA (04)

FOR SALE: ICOM 735 \$750
Power Supply PS-55 \$100
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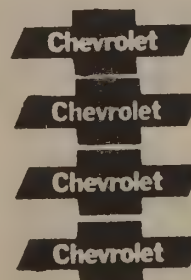
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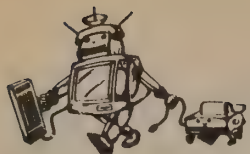
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Auto-Call Index for club news column.



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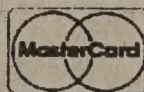
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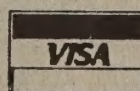
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AUTO-CALL POLICY

PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is re-typed to preserve uniformity of style in the magazine. We use Word Perfect 5.1 word processing program, Hayes compatible modem (300 or 1200 baud) and can use either 3½" or 5¼" MS-DOS diskettes.

In determining space requirements, figure about 600 words per page (50 lines at 12 words per line), including the space taken up by headings, photographs, etc. Either black-and-white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio. (Copy space is 7" wide by 9" high.) Copy can be reduced or enlarged as necessary.

Columns from Foundation member clubs are eagerly solicited and any items of general Amateur Radio interest are most welcome. The editor does reserve the right to edit or reject any portion of any copy submitted and to make minor changes to make copy fit available space.

SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack Sales will **NOT** be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the call sign or the full name of the advertiser. If the full address is not included in the ad, we prefer to include the city along with a telephone number so that readers will know whether a long-distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, phone the Auto-Call editor at (703) 536-8469, McLean, VA.

ADVERTISING SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3¢ per word - with a \$1.00 minimum. Commercial vendors and non-subscriber rate is 17¢ per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the Shack Sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be pre-paid for at least the current month.

Rates per Issue

Page Col	inch	1 Year	6 Times	3 Times	1 Time
Full	18	\$75.00	\$90.00	\$100.00
1/2	9	55.00	65.00	71.00
1/3	6	40.00	46.00	51.00
1/4	4½	33.00	38.00	41.00
1/6	3	22.00	26.00	28.00
1/8	2½	17.00	20.00	22.00
1/9	2	16.00	19.00	21.00
1/18	1	8.50	10.00	11.00

Based on camera-ready copy.

Extra charges for halftoning photos and for in-house artwork or layout.

Copy must be received by the 5th of the month preceding publication date.
(e.g., Copy for August issue must be received by 5 July)

All Advertising Must be Pre-paid



JOIN ARRL

BENEFITS FOR YOU

QST, QSL Bureau Awards, Low Cost Insurance Operating Aids,
Government Liaison and More—Much More!

MEMBERSHIP APPLICATION

Name _____ Call _____

Street _____

City _____ Prov./State _____ PC/ZIP _____

\$30 in U.S. \$42 elsewhere (U.S. funds) Licensed amateurs or age 65 or over, upon submitting proof of age, may request special dues rate of \$24 in the U.S. \$36 elsewhere in U.S. funds. Persons age 17 and younger may qualify for special rates, write for application.

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

VISA, MC, AMEX, Discover # _____

Signature _____ Expires _____

The American Radio Relay League

225 Main St.

Newington, CT. 06111

USA

AUTOCALL

Atlantic Division Director
Hugh Turnbull, W3ABC
6903 Rhode Island Avenue
College Park, MD 20740
Phone: (301) 927-1797

Roanoke Division Director
John Kanode, N4MM
Rt 1, Box 73-A
Boyce, VA 22620
Phone: 703-837-1340

AUTO-CALL Magazine

P.O. Box 7612

Falls Church, VA 22040-1452

Please enter my NEW _____ RENEWAL _____ GIFT _____ subscription to
Auto-Call

For 1 Year _____ 2 Years _____

Subscription rate: \$8.00 per year.

(Sample copy of latest issue \$1.00)

will be applied to subscription

NAME _____ CALL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Make check payable to the Foundation For Amateur Radio

APRIL 1991

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<u>EXAMS</u> Lexington	1 Adams Dept of State	2 BRATS Antietam PG Wireless	3 BARC MARC	4 Anne Arundel	5 Mobileers Shenandoah	6 Baltimore Hamboree <u>EXAMS</u> College Park Williamsburg
7 Baltimore Hamboree	8 PVRC	9 MADRAS Fauquier	10 Laurel (Inf) Pentagon FAR	11 Mt Vernon No VA	12 Alexandria SMARC Vienna	13 Stafford <u>EXAMS</u> Anne Arundel Herndon Harrisonburg
14	15 Ole VA Hams SPARC	16 Antietam Arlington Woodridge	17 Goddard MARC	18 Anne Arundel QCWA #20	19 RCARA Shenandoah <u>EXAMS</u>	20 Capital City Tri County Stafford <u>EXAMS</u> Laurel
21 SARA Hamfest	22	23 Columbia MADRAS	24 Laurel QCWA #20	25 St Marys	26 New Carrollton Vienna	27 Stafford
28 Adventists <u>EXAMS</u> Antietam	29	30	31			

NCDXA Net every Sunday 147.420 at 8:30 p.m.

AUTO-CALL

P.O. Box 7612
Falls Church, VA 22040-1452

Nonprofit Organization
U.S. Postage Paid
Arlington, VA 22210
Permit 757

ADDRESS CORRECTION REQUESTED

91/09 02649
ALFRED A LAUN III K3Z0
PO BOX 31097
TEMPLE HILLS MD 20757